DOCUMENT RESUME

ED 403 650 EA 028 199

TITLE	Learning Site Analysis Form. Reference Guide. Connections: Linking Work and Learning Series.
INSTITUTION	Northwest Regional Educational Lab., Portland, OR. Education and Work Program.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	96
CONTRACT	VN93003001
NOTE	108p.
AVAILABLE FROM	Northwest Regional Educational Lab., Document Reproduction Service, 101 SW Main Street, Suite 500, Portland, OR 97204 (1-800-547-6339, ext 519).
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Career Education; *Career Exploration; *Career Guidance; Career Information Systems; Career Planning; *Education Work Relationship; Elementary Secondary Education; Internship Programs; Job Analysis; Occupational Information; School Business Relationship; *Work Experience Programs

ABSTRACT

The Learning Site Analysis Form (LSAF) helps teachers and other school staff collaborate with employers to identify opportunities for students to learn at the workplace. This reference guide is designed to help school staff and employers use the LSAF and apply its results to structure experiences that connect classroom learning to the world of work. The LSAF is used to inventory the skills used in a specific job, describe the characteristics of the workplace, and identify applications of academic subjects at work. The guide contains three sections: (1) the "Introduction," which includes discussion on the uses of the LSAF and how often it should be done; (2) "Completing the Learning Site Analysis Form," which discusses sections of the LSAF, the LSAF questions, conversation aids, and tips and reminders; and (3) "Sample Learning Site Analysis Forms" for veterinarian, electrician, fast-food resturant manager, and elementary teacher positions. Contains a glossary and a master copy of the LSAF. (LMI)

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Learning Site Analysis Form

Reference Guide

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CONNECTIONS
LINKING WORK AND LEARNING

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Preface

The *Learning Site Analysis Form (LSAF)* is a tool to help school staff and employers identify workplace learning opportunities for students. The *LSAF* helps facilitate a conversation between school and employer partners about the skills required by a job, the unique aspects of a workplace, and the application of academic subjects at work.

Once complete, the *LSAF* is a rich resource of information about a particular workplace in the community. It can be used for a wide variety of purposes such as designing integrated learning projects, structuring internships, developing lesson plans with a real-world context, placing students at worksites, targeting employer recruitment efforts, and applying the recommendations of the Secretary's Commission on Achieving Necessary Skills (SCANS) and "all aspects of the industry" (AAI) in the classroom. The *LSAF* is also a valuable tool for school staff who are doing summer internships with employers in order to better understand the connection between what they teach and how these skills and knowledge are applied in the workplace.

The Northwest Regional Educational Laboratory (NWREL) chose to develop the *LSAF* because it is committed to fostering productive partnerships between schools and communities, expanding opportunities for youth to make informed career and life decisions, preparing youth for the demands of a changing workforce, and using the community as a learning resource.

NWREL has a 30-year track record of providing research and development services addressing the needs of children, youth, and adults. While governed by a board of directors drawn from Alaska, Idaho, Montana, Oregon, and Washington, the Laboratory's leadership activities extend nationwide.

NWREL's Education and Work Program serves local and state organizations committed to building systems that serve all persons on their life and career journeys. The program has been a leader in school-to-work and educational reform for more than 25 years. Its staff of professional educators has worked with organizations throughout the Northwest and the nation to develop innovative educational programs in such areas as work-learning integration, assessment, career guidance, and school-business partnerships.

Northwest Regional Educational Laboratory

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This publication is based on work sponsored wholly, or in part, by the U.S. Department of Education under contract # VN93003001, Community Education Employment Center (CEEC). The content does not necessarily reflect the views of the Department or any other agency in the U.S. government.

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Acknowledgments

The development of this guide was predicated on partnership. The Northwest Regional Educational Laboratory (NWREL) would like to thank the many people who committed their time and talents to help make this a useful resource for anyone interested in creating stronger connections between schools and employers.

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In addition to the people who contributed to this guide, various written materials were used as resources, including:

- *Experience-based Career Education*, the Northwest Regional Educational Laboratory
- *Experience-based Learning: How to Make the Community Your Classroom*, the Northwest Regional Educational Laboratory
- *School-to-Work Toolkit: Building a Local Program*, Jobs for the Future
- *What Work Requires of Schools: A SCANS Report for America 2000*, the Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor
- *New Directions*, an "All Aspects of the Industry" curriculum developed by the Boston Public Schools

learning site
analysis form

introduction

The *Learning Site Analysis Form (LSAF)* helps you—teachers and other school staff—collaborate with employers to identify opportunities for students to learn at the workplace. Once complete, the *LSAF* is a rich source of information for integrating school- and work-based learning.

This reference guide is designed to help you effectively use the *LSAF* and apply its results to structure experiences that connect what students learn in school with the world of work.

What is the *LSAF*?

The *Learning Site Analysis Form* (*LSAF*) is a user-friendly tool to help school staff and employers inventory the skills used in a specific job, describe the characteristics of the workplace, and identify applications of academic subjects at work. The *LSAF* takes roughly an hour to complete and requires no prior knowledge of specific jobs, industries, or workplaces. The 10-page form consists of a series of 25 questions that are based on three frameworks:

- **Secretary's Commission on Achieving Necessary Skills** (SCANS), which identifies foundation skills (basic skills, thinking skills, and personal qualities) and competencies (ability to use resources, interpersonal skills, information, systems, and technology) essential for successful job performance.
- **"All aspects of the industry" (AAI)**, which emphasizes eight broad, transferable concepts (planning; management; finance; underlying principles of technology; labor issues; community issues; technical and production skills; and health, safety, and environmental issues) common to any industry or enterprise.
- **Academic content areas**, focusing primarily on mathematics, science, reading, writing, social studies, and art.

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"The most under-used technology today isn't the computer; it's conversation."

—Teacher

The purpose of the *LSAF* is to facilitate a free-flowing conversation between school staff and the employer to: (1) build mutual understanding of the different ways students can acquire and apply skills and knowledge inside and outside the classroom, (2) identify learning opportunities at the workplace, and (3) connect learning at school with learning in the community. Written in plain language, the *LSAF* is an easy way for school staff to collect comprehensive information about workplaces that they can then use to structure activities that integrate school- and work-based learning.

What are uses for the *LSAF*?

The *LSAF* can be used in a variety of ways, depending on how work-based learning experiences are planned and implemented at your school.

- **Creating integrated workplace learning projects**—One way to use the completed *LSAF* is to create integrated workplace learning projects. An integrated workplace learning project is an intellectually rigorous, field-based learning experience in which students apply academic skills by solving real-world problems at a workplace or in the community. Students, teachers, and employers work collaboratively to define the theme, goals, and activities of the project and to negotiate its outcomes and assessment criteria. These types of projects are typically done by students in internships. Detailed information on how to create such projects can be found in the *Integrated Workplace Learning Projects* guide, another product in the *Connections* series. (See the inside back cover.)

  The *LSAF* is a good foundation for project planning because it provides an inventory of skills required by the job, a profile of the workplace environment, and a list of ways different academic content areas are and can be applied to the job. Based on the *LSAF*, teachers and students can work collaboratively with employers to design projects that effectively connect school- and work-based learning.

- **Giving classroom learning a real-world context**—Students often become more engaged in classroom learning when they understand how it is applied in the real world. Using the *LSAF*, teachers can create a real-world context for their subject matter by weaving information captured on the form into their lessons. The *LSAF* can help overcome the challenge of establishing a connection between school and work by giving teachers clear information about jobs in the community and potential ways students can learn and practice a range of skills while at the workplace.

  For example, an *LSAF* completed with the manager of a fast-food restaurant reveals that the job requires a lot more than being able to flip hamburgers. The manager has to have good interpersonal and communication skills to greet customers, resolve conflicts, problem solve, exercise leadership, and motivate employees to act as a team. Mathematics skills are necessary to calculate budgets, order supplies, and explain pay scales and benefits to new workers. The manager also needs to read manuals on safe food preparation and equipment maintenance, and write staff memos and incident reports. To oversee the daily routine the manager must draw on skills learned in school and the managerial training program, as well as in past jobs as a cashier and cook at the restaurant.

  The purpose of the *LSAF* is ***not*** for schools to train students for specific jobs. Its value is for teachers to expand their understanding of the world of work and use that knowledge to give academic content a real-world context. In other words, the *LSAF* helps school staff create lesson plans and curricula that maintain academic rigor while at the same time demonstrating relevance to life outside the classroom. When these two factors are combined with students' interests, the result is often students who are more invested in what they study because they can see how it connects to their lives today and in the future.

- **Applying SCANS and "all aspects of the industry"**—Increasingly, schools across the country are adopting SCANS and AAI as frameworks for learning. A challenge for teachers is to integrate these two frameworks into their

"It hadn't occurred to me what resources a community can be to a classroom. What an empowering concept—that I can open up my classroom to the world and provide my students with resources that go beyond what they could find in a textbook."

—Teacher

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"The visits to worksites were of immense importance. When employers give me specific information about the workplace that I can give my students, the message is more valid. The work ethic needs to come alive for kids before they buy into it."

—Teacher

daily lesson plans. The *LSAF* can help teachers weave these frameworks into their classes by providing real-world examples of how the relevant skills and aspects are applied on the job. The matrix below suggests which *LSAF* questions (including their probe questions and examples) highlight how the employer applies SCANS and how AAI relates to the job. The matrix is only a guideline; the information relevant to SCANS and AAI may vary with each *LSAF* you complete.

- **Guiding teacher internships**—As increasing numbers of schools become involved with work-based learning, teachers are taking advantage of opportunities to do summer internships at worksites or in industries where their students are placed during the school year. These experiences help teachers understand and integrate work-based learning into their lesson plans. Like students, teachers benefit when the internship has a clear purpose and structure. With questions that focus on SCANS skills, "all aspects of the industry," and academic content areas, the *LSAF* gives teachers a framework for thinking about the connection between what they teach and how these skills are applied in the workplace.

- **Creating an inventory of employers in the community**—The *LSAF* is designed to collect comprehensive information

SCANS.....Related *LSAF* Question(s)		AAI.....Related *LSAF* Question(s)	
Basic Skills	6, 8, 16, 19, 20, 21	Planning	2, 9, 12, 13, 17, 25
Thinking Skills	8, 9, 12, 17, 22, 23, 24, 25	Management	10, 12, 14, 17
Personal Qualities	2, 3, 7, 9, 10, 17	Finance	17,20
Ability to Use Resources	2, 6, 10, 11, 17	Technical & Production Skills	2, 3, 4, 7, 8, 9, 10, 15
Interpersonal Skills	5, 6, 7, 8, 10, 18, 21	Underlying Principles of Technology	11, 19,20, 21, 22, 23, 24, 25
Information	9, 11, 16	Labor Issues	12, 17
Systems	10, 12, 13, 17, 18	Community Issues	18, 22
Technology	4, 15	Health, Safety, Environmental Issues	1, 14, 18

about employers. When kept on file, completed *LSAFs* become a valuable inventory of learning opportunities in the community. An *LSAF* remains valid as long as the job that is profiled does not undergo dramatic changes. Therefore, an *LSAF* can, over a period of years, serve a variety of purposes, including placing students at worksites for different work-based learning activities and providing a basis for career counseling activities. The *LSAF* can also facilitate employer recruitment efforts. Using completed *LSAFs* as a resource, school staff have a ready supply of documented examples of how the workplace can provide learning opportunities for students. With real examples taken from the community, school staff can make a strong case for the benefits of integrating school- and work-based learning. These kinds of details can be instrumental in convincing employers to get involved with students.

Using the *LSAF* to create an inventory of employers is practical for programs at any stage of development. The process of identifying and recording learning opportunities at the workplace is as valuable to programs in initial design stages as it is to those well under way.

- **Placing students at worksites**—For a school involved with work-based learning, the *LSAF* can be a practical administrative tool for placing students at worksites. The *LSAF* can be used to match students with or help them select worksites based on a variety of criteria. For example, if a student wants to work in a specific field, with a certain technology, or in a particular environment, the *LSAF* provides information to help match him or her with the appropriate people and locations. The *LSAF* can be used to place a student in all types of work-based learning activities (see the continuum on the following page); however, it is probably most practical for internships or extensive work-based learning where detailed information is required to make the experience academically rigorous and appropriate for students' interests.

- **Profiling service-learning opportunities**—By structuring a conversation with an employer, the *LSAF* gathers information about a particular job and workplace. Businesses, however, are not the only settings in which students can learn, apply,

and integrate important skills and knowledge. Service-learning projects, which may or may not be organized at a specific location or around clearly defined jobs, provide important learning opportunities for students. Although it has a work-based focus, the *LSAF* can be adapted to profile service learning activities in the community. By adjusting the language in the *LSAF* (for example, changing "job" to "service project," or "workplace" to "community site") the form becomes applicable to a wider range of learning experiences.

- **Giving students the responsibility for gathering information about the workplace**—Although primarily for use by adults, completing the *LSAF* can also be a valuable assignment for students. The question-and-answer format allows students to practice communication and social skills as they learn about the demands of a job and the atmosphere of a workplace. Students will need sufficient time at the workplace to complete the form. For this reason, the *LSAF* is recom-

Work-based Learning Continuum

Field Trip	Job Shadow	Career Exploration	Internship	Extensive Work-based Learning
1-3 hour tour of a workplace	3-6 hour experience during which students observe employees	10-30 hour experience during which students spend time one-on-one with workers and engage in hands-on activities	3-18 week experience during which students develop broad skills through hands-on learning and instruction, culminating in a product or presentation	3-12 month experience during which students gain specific technical skills, college credits, and/or certification through hands-on learning closely integrated with school-based activities

mended for students involved in internships or extensive work-based learning experiences that extend over a period of weeks or months (see continuum on previous page). Students participating in shorter experiences, such as job shadows and career explorations, benefit from assignments and questionnaires that are less time intensive. (See inside back cover for information on the *Job Shadow Guide* and the *Career Exploration Guide*, two additional products in the *Connections* series).

"I learned that without communication nothing can be understood, completed, accomplished, or planned."

—Student

How often should an *LSAF* be done?

It is only necessary to complete one *LSAF* for each job at a worksite. The *LSAF* is a profile of a particular job, not a particular person; therefore, once it is complete, there is no reason to update it unless the job it describes undergoes significant change. If the employer who participated in the *LSAF* process leaves the job but the job stays the same, the *LSAF* remains valid. The *LSAF* is designed this way so that a single form can capture the information needed to place multiple students over several years at a single workplace and to plan different types of work-based learning activities and projects. There are two important benefits to this design. First, it minimizes the demand on employers' time, which increases the likelihood that they will stay involved in work-based learning activities with students. Second, it saves school staff time by making it possible to create a library of information that will support work-based learning activities year after year.

A note on the language

Throughout this guide the term "employer" is used to describe the person at the workplace or in the community who is participating in the *LSAF* conversation. When we refer to the employer we mean anyone—a supervisor, owner, frontline employee, project volunteer—interested in collaborating with school staff to identify learning opportunities for students.

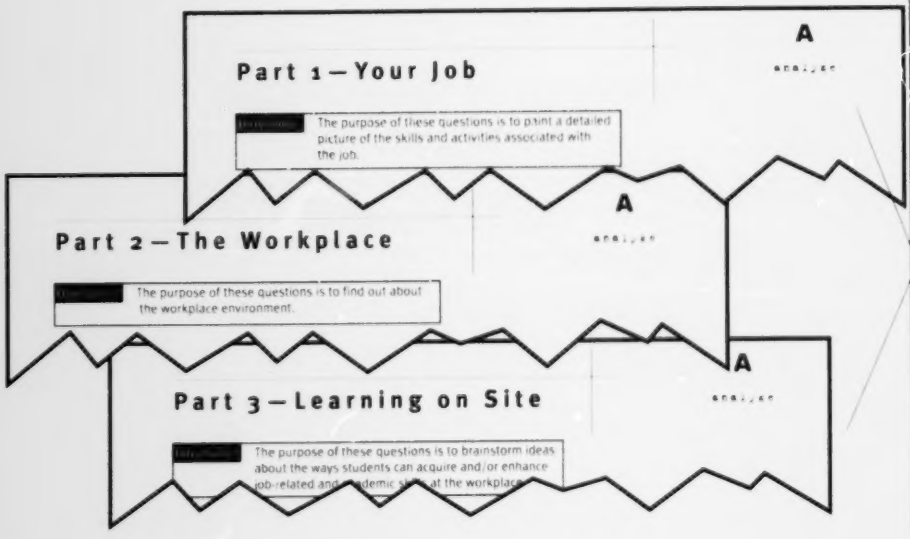
completing the learning site analysis form

The *Learning Site Analysis Form* (*LSAF*) is a ready-to-use tool for structuring a conversation between you and an employer. The *LSAF* is self-explanatory and requires no special knowledge of a workplace. To complete it successfully you need only be willing to talk with an employer and think collaboratively about potential learning opportunities at the workplace.

Sections of the *LSAF*

The *LSAF* is divided into three sections:

- The section titled ***Your Job*** includes questions about the skills and activities associated with a specific job.
- The section titled ***The Workplace*** includes questions about the characteristics and atmosphere of the workplace.
- The section titled ***Learning on Site*** includes questions about the ways students can acquire and practice academic and employability skills at the workplace.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Part 1—Your Job
The purpose of these questions is to paint a detailed picture of the skills and activities associated with the job.
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Part 2—The Workplace
The purpose of these questions is to find out about the workplace environment.
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Part 3—Learning on Site
The purpose of these questions is to brainstorm ideas about the ways students can acquire and/or enhance

The *LSAF* is divided into three sections. Directions at the beginning of each section explain the purpose of the questions.

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The *LSAF* questions

The *LSAF* questions are designed to gather comprehensive information about the work a person does, the range of skills used in the job, the atmosphere of the workplace, and learning opportunities for students. You can tailor the form to serve your particular program goals by adapting, adding, or deleting questions; however, before making changes, carefully consider each question and its relation to the others.

The following pages describe the three sections of the *LSAF* and the purpose of each question. In the margins are sample pages of an *LSAF* conducted with a veterinarian. The full version of this sample can be found on page 29.

Your Job, the first section of the *LSAF*, consists of 13 questions focusing on the specific skills and activities associated with the employer's job. The questions encourage the employer to talk about the requirements, routines, and interactions that define the work.

#1 Describe your work environment.

The purpose of this question is to understand the atmosphere where the employer works. Try to build a "big picture" of the job by asking about defining characteristics of the work environment—such as physical layout, number of staff, sights, sounds, smells, pace, and stress level.

#2 What is a typical day at work like?

Having discussed the work environment, determine how the employer functions on a daily basis. Encourage the employer to paint a detailed portrait of the activities, interactions, and rhythm of a typical day.

#3 What are the five most important responsibilities of your job?

Question #3 asks the employer to categorize the overall tasks that define his or her job. The purpose of this question is to create a framework for understanding how all the

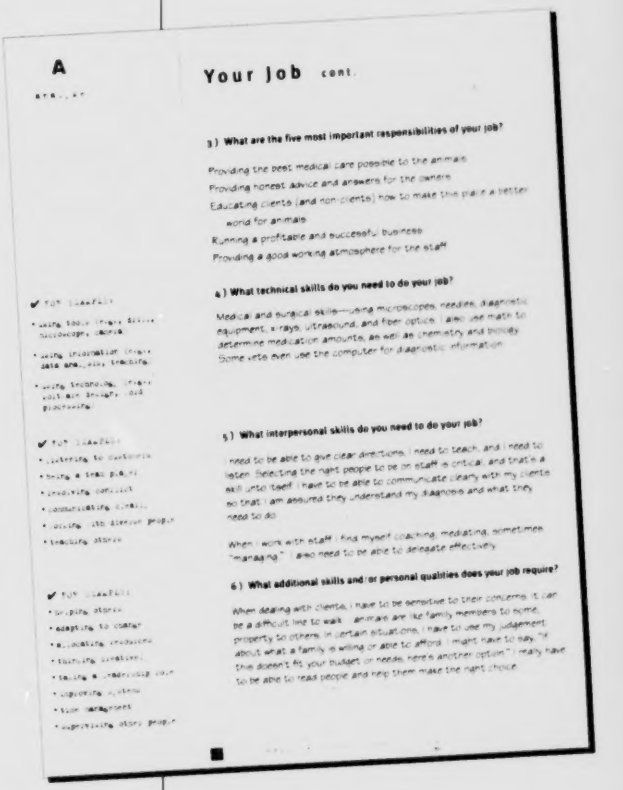
"At first I was nervous asking all the questions, but I found that people really like to talk about themselves. I think they are flattered that someone would want to know about what they do."

—Program Coordinator

specific daily activities discussed in the previous question fit together as integrated pieces of the job as a whole.

#4 What technical skills do you need to do your job?

Technical skills are the specialized abilities a person needs to do a particular job. Whether it is operating a tool, repairing a machine, interpreting data, using a computer, managing a video teleconference, or reading a blueprint, technical skills are what a person has to learn or know how to do to meet the demands of the job. Discuss with the employer which special abilities characterize the job.



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Your Job cont.

3) What are the five most important responsibilities of your job?

Providing the best medical care possible to the animals
Providing honest advice and answers for the owners
Educating clients (and non-clients) how to make this planet a better world for animals
Running a profitable and successful business
Providing a good working atmosphere for the staff

4) What technical skills do you need to do your job?

Medical and surgical skills—using microscopes, needles, diagnostic equipment, x-rays, ultrasound, and fiber optics. I also use math to determine medication amounts, as well as chemistry and biology. Some vets even use the computer for diagnostic information.

5) What interpersonal skills do you need to do your job?

I need to be able to give clear directions, I need to teach, and I need to listen. Selecting the right people to be on staff is critical, and that is a skill unto itself. I have to be able to communicate clearly with my clients so that I am assured they understand my diagnosis and what they need to do.

When I work with staff, I find myself coaching, mediating, sometimes "managing." I also need to be able to delegate effectively.

6) What additional skills and/or personal qualities does your job require?

When dealing with clients, I have to be sensitive to their concerns. It can be a difficult line to walk. Animals are like family members to some, property to others. In certain situations, I have to use my judgement about what a family is willing or able to afford. I might have to say, "If this doesn't fit your budget or needs, here's another option." I really have to be able to read people and help them make the right choice.

#5 What interpersonal skills do you need to do your job?

It is a rare job that does not require contact with people. Whether it is a connection within the business (for example, with co-workers, supervisors, or board members) or outside it (such as with customers, vendors, or community members), most jobs require people to coordinate and collaborate with others. This question is an effort to pinpoint interpersonal skills the employer needs to make relationships with other people productive and positive.

#6 What additional skills and/or personal qualities does your job require?

Questions #4 and #5 address two specific categories of skills, but it is likely there are additional abilities the employer needs to do the job successfully. Question #6 asks the employer to reflect on the other skills essential for handling the daily demands of the job and negotiating the many challenges of the work environment. The employer might list things like an ability to manage time effectively, adapt to change, handle stress, allocate resources, or use good judgment in hiring.

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"Sometimes I don't think people realize how much they really do. After I ask all the questions about skills they use, a light seems to go on in their heads. It's like they are saying to themselves, 'Hey, I do a lot around here.' I think they appreciate that awareness."

—Program Coordinator

#7 How did you acquire the skills you just identified?

The responses to questions #4 through #6 make it evident that every job requires a range of skills. Question #7 asks the employer *how* he or she acquired those skills. Keep in mind that everyone has different learning styles. Some people learn best through formal methods—such as training, workshops, and classes—while others prefer more casual approaches—such as advice from colleagues, trial and error, and observation.

#8 How could you help a student learn and practice the skills you identified as important to your job in questions #4 through #6?

Referring to questions #4 through #6, identify the activities a student could engage in or observe to begin to acquire the technical, interpersonal, and other skills essential for the job.

#9 Describe a recent problem on the job and how you solved it.

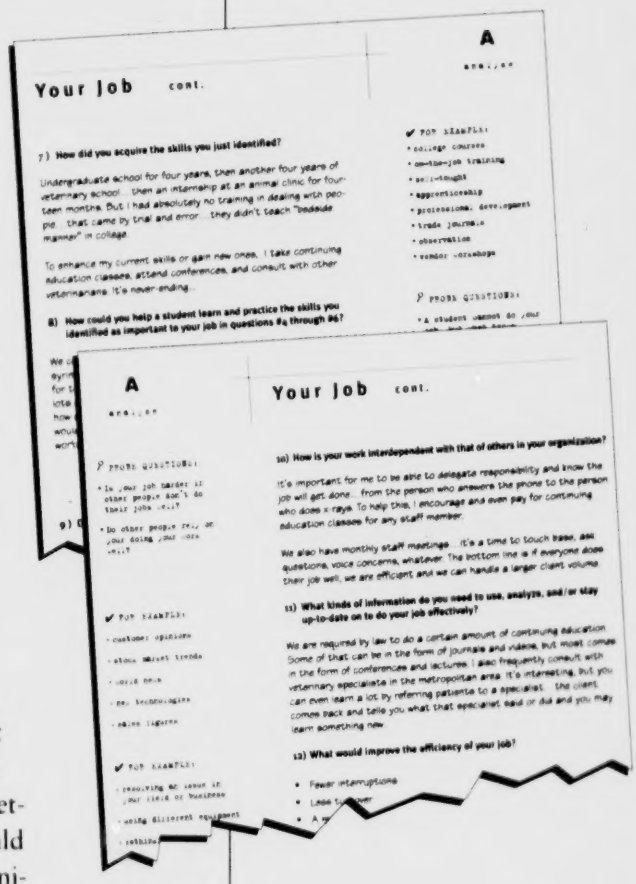
Thus far, the majority of *LSAF* questions have centered on the specific skills associated with the daily routine of the job. Question #9 is a variation of this theme, asking the employer to describe the steps required to handle a recent problem at work. This is an opportunity to gain an anecdotal understanding of how the person uses a range of abilities to cope not only with routine situations, but also with ones that are random or unexpected.

#10 How is your work interdependent with that of others in your organization?

No job exists in isolation; every job is part of a web of interrelated activities. For example, if a clerk at an auto repair shop misreads an item number on a parts inventory list, the mechanic's service order is delayed, and the shop's manager is put in the awkward position of telling a customer that the car repair will be delayed a day. Question #10 probes the way in which the employer's job fits into the broader scheme of the workplace. How does his or her work influence the way other people do their jobs? And how does their work in turn affect work done by the employer?

#11 What kinds of information do you need to use, analyze, or stay up-to-date on to do your job effectively?

Information is the key to understanding the direction and meaning of events. Question #11 asks the employer to reflect on the types of information—such as customer databases, training manuals, current events, and fiscal reports—that are essential to doing the job well.



#12 What would improve the efficiency of your job?

Every process has room for improvement. This question asks the employer to specify the things (such as tools, training, or physical space) or issues (such as systems, relationships, or organizational structures) that would make it possible to perform the job better. The improvements do not have to be limited to the person's specific job or workplace, but can include larger-scale changes in the field. For example, a lab technician might believe that grant application rules should be eased to fund more research programs or a veterinarian might think pet care providers should have a stronger say in setting standards for animal breeding. Whether the employer chooses to talk about job-, workplace-, or industry-related improvements, question #12 allows the employer to provide an interesting perspective on the conditions of his or her work.

#13 How do you think your job will change over the next 10 years? Why?

In the world of work few things are static and unchanging. Jobs, industries, products, technologies, consumer interests, productivity, and skill demands are only a few of the factors in a constant state of flux. Question #13 asks the employer to describe future trends for the job.

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The Workplace, the second section of the *LSAF*, shifts the focus of the *LSAF* conversation from the individual employer to the characteristics of his or her workplace. The section, which consists of five questions, puts the person's specific job within a broader context of the workplace and the community.

#14 What are the health and safety issues at the workplace?

Health and safety are essential concerns at any workplace. Question #14 asks the employer to reflect on what it takes to work safely on the job. It is a good idea to ask whether students will be expected to wear any of the special clothing or equipment discussed. If so, inquire whether the organization will provide the necessary safety gear or whether students will be expected to purchase it.

#15 What technology and special tools are used by you and others at the workplace?

Different jobs require different tools. Discuss with the employer the range of equipment or systems used at the workplace. Remember, the purpose of this section of the *LSAF* is to explore the characteristics of the entire workplace. Therefore, use question #15 to build a broad understanding of the tools and technology used throughout the location where the person works.

#16 What written materials are used at the workplace?

Written materials—such as books, manuals, blueprints, specifications, printouts from Internet searches, brochures, annual reports, and catalogs—are important resources for understanding what happens at the workplace. While talking to the employer about the kinds of written materials used at the workplace, ask whether any could be made available to students to help them understand the organization's work.

#17 How is the workplace managed to ensure it is productive and financially sound?

Productivity and financial stability do not happen by themselves. A workplace requires a structure or organiza-

tion that fosters a positive work environment so that employees are productive and things get done the way they should. Discuss with the employer how management responsibilities are handled and what accountability exists to help the business achieve its goals.

#18 What impact does the workplace have on the local and global communities?

Just as jobs and individuals at a workplace are interrelated and interdependent, the workplace is connected to and affected by the people and businesses around it. Every workplace—no matter where it is located, what it produces, or what service it provides—has some effect on the world around it. Talk with the employer about the ways the workplace is connected to the local and global communities to see how it fits into the "big picture."

Learning on Site, the third section of the *LSAF*, consists of seven questions. The purpose of these questions is to brainstorm ideas for activities or projects students can do at the worksite to learn and practice academic and employability skills. Unlike the previous two sections, which ask the employer to reflect on the job and workplace, questions #19 through #25 focus on generating new ideas to connect school- and work-based learning.

#19 What academic skills do you need to do your job?

Although a person may not be consciously aware of it, academic skills are necessary to carry out even the most simple, routine tasks at work. Whether is it using mathematics to do a budget, English to compose a memo, or geography to give driving directions, skills learned in school have important applications on the job. Talk to the employer about how academic subject matter is used regularly on the job.

#20 What are at least three ways a student could learn or apply mathematics at the workplace?

It is easy to take for granted how often basic and complex mathematic strategies are applied at work. For some

employers—such as architects or accountants—the application of math skills seems obvious; others will question whether math is used at all as part of their work. For example, at first a plumber may not recognize measuring pipe, selecting proper tools, estimating costs, ordering supplies, and calculating bills as the application of math. Question #20 asks the employer to identify specific examples of how mathematics is used on the job and ways a student can become involved. A plumber, for example, might ask a student to estimate the cost of a job.

#21 What are at least three ways a student could learn or apply communication skills at the workplace?

Any organization that depends on people working together or with customers requires communication skills. Whether it is through writing (such as memos, letters, meeting minutes, newsletters, purchase orders, or proposals) or speaking (presentations, training, advice, telephone calls, or casual conversation), communication is the key to connecting with people both inside and outside the organization. Ask the employer what kinds of activities a student could get involved in to practice communication skills.

"Before I met the employer I didn't see how making fiber optic cables related to my English class. However, once we got talking about what the job requires and what students are lacking when they start working, I found much relevance."

—Teacher

#22 What are at least three ways a student could explore social issues at the workplace to understand important aspects of your job or industry?

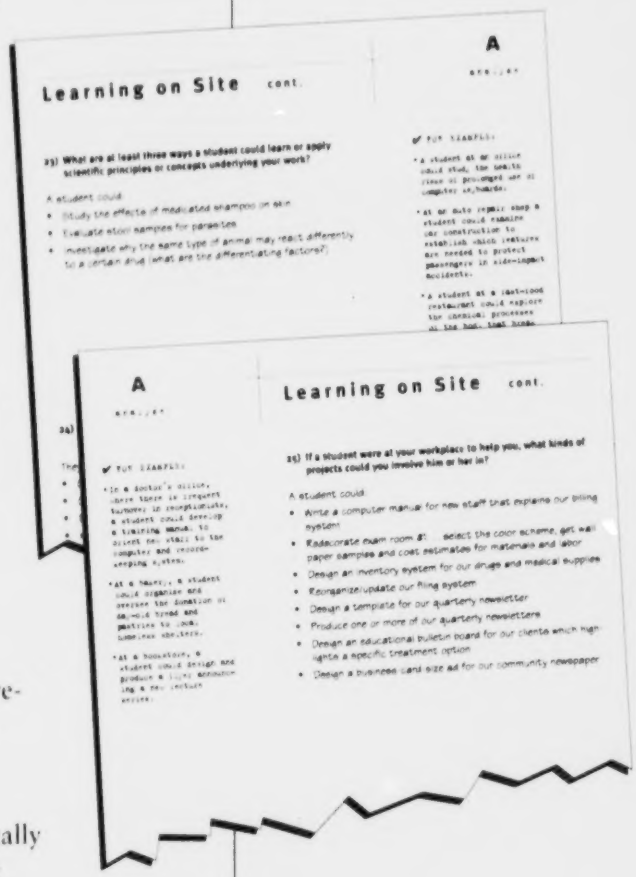
Every job or industry has important social issues—people, events, innovations—associated with it. By exploring a social studies topic related to the job or industry, a student develops research skills while broadening an understanding of the workplace. Challenge the employer to think of specific issues regarding the history, geography, social impact, or future trends of the job or industry that could be a subject of inquiry for a student. For example, a student at a car dealership could study how post-World War II economics affected American car sales. A student at a utility company could conduct a public opinion survey on using nuclear or natural sources of energy.

#23 What are at least three ways a student could learn or apply scientific principles or concepts underlying your work?

Science is all around us all the time. For some employers—such as doctors, meteorologists, and organic farmers—the application of science on the job is clear, but for others the connection may not seem as direct. In every job scientific principles and concepts are involved. For example, combustion, viscosity, friction, and hydraulics are part of a mechanic's work with cars. In an office, fiber optic telephone technology, ergonomically designed chairs, and UV radiation computer screen filters are commonly found science-driven devices. Discuss with the employer the scientific issues that affect the job or workplace and challenge him or her to think of ways a student could engage in or explore them.

#24 What opportunities are there for students to contribute to a creative or artistic process or product at the workplace?

To respond to this question the employer needs to let go of any preconceived notions of artistic or creative expression. Question #24 is asking about more than opportunities for students to paint and draw; it is intended to assess the different ways aesthetics play a role at the workplace. Lawyers who craft strong opening arguments; carpenters who take care in matching wood grains; presenters who make clear and eye-catching computer graphics; office managers who select color schemes or art work for reception areas; secretaries who format documents; retailers who decorate display windows; marketing and advertising consultants who use sensory appeal—all are expressing themselves artistically or creatively. Discuss with the employer how aesthetics—in the broadest or narrowest sense—affect the workplace and brainstorm ways a student can become involved in those efforts.



#25 If a student were at your workplace to help you, what kinds of projects could you involve him or her in?

Questions #19 through #24 focus on how the employer

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"I plan to completely revamp my chemistry curriculum. Everything I will cover next year will focus on students' lives and what they will face after school. I know it will be lots of work—but it will be worth every minute."

—Teacher

could help a student learn or apply specific academic or employability skills. Question #25 asks how a student could help the employer by doing a project. The project might be something the employer has wanted or needed to do but has lacked the time or resources to accomplish. For example, brokers at a real estate firm with newly acquired Internet capabilities may not have time to learn how to browse the network for information. A student could experiment with the system and then provide a training session. At a bookstore, a student could design and produce a flyer announcing a new lecture series. Projects give students the chance to gain hands-on experience of different aspects of the job and workplace while at the same time being helpful to the employer. Keep in mind that students involved in work-based learning activities may be subject to labor law age restrictions, depending on the nature of the projects they are involved in.

After you have completed the *LSAF* you will likely discover that question #25 is not the only place where the employer suggests projects that link school and the workplace. Keep this in mind when using the *LSAF* to help students plan integrated projects or structure an internship; remember to scan the entire *LSAF* for ideas, not only question #25.

Conversation aids

Each question on the *LSAF* includes either examples (indicated in the margin by a ✔) or probe questions (marked in the margin by a ?). These examples and additional questions are provided to help you keep the conversation going smoothly. While an employer may understand a question, it might not be clear what information you want. The examples and probe questions can help you spur the employer's thinking without leading to a specific answer. It may not be necessary to use these examples and probe questions all the time; use them when you feel the conversation has stalled or veered away from the intent of the question.

Tips and reminders

The questions in the *LSAF* ask the employer to describe aspects of their work and to generate ideas for how students could learn at the worksite. Remember that some people may have difficulty answering the questions because they feel shy about expressing their ideas or unsure about the kind of information you are looking for. To help overcome such difficulties consider the following suggestions:

- **Become familiar with the *LSAF* form**—Before you use the *LSAF*, have a clear understanding of its purpose and how you want to use the results. The better acquainted you are with the form, the easier it will be to work through the *LSAF* questions with employers.

- **Send the employer a copy of the *LSAF* in advance**—If the employer has had the chance to read the *LSAF* before you arrive, the conversation is likely to move more smoothly and quickly. It is not advisable, however, to send out an *LSAF* and ask the employer to complete it alone. You will collect more comprehensive and useful anecdotal information by visiting with and talking to the employer than by letting the employer complete the *LSAF* as a written survey. In addition, without the conversation an important outcome of the *LSAF* process is lost: the *LSAF* is intended not just to collect information, but to build a mutual understanding of opportunities for students to connect learning at school and the workplace. This element can be generated only through the interactive nature of conversation.

- **Use the examples and probe questions**—These two conversation aids are designed to help you move the conversation along smoothly. If you ask a question the employer does not know how to answer, use one or more of the examples or probe questions to spur ideas.

- **Be flexible and improvise**—Each *LSAF* conversation you have will be unique. One person may feel most comfortable talking about experiences on the job, while another may be more interested in discussing ways to get students involved in learning at the workplace. Different people will need clarification on different questions and will respond to different probe questions and examples. Be flexible, adjusting the pace and focus of the conversation according to each employer.

- **Draw on personal observations about the workplace**—Prior knowledge of a job or workplace is not required to complete the *LSAF*; however, if you have the chance to get familiar with the site, it will likely make the conversation go more smoothly. If you have a chance to tour the site or shadow the employer before completing the *LSAF*, observe carefully what people do, how they interact, and what the atmosphere of the workplace is. Becoming acquainted with the site in advance gives you a context for asking the *LSAF* questions and understanding the employer's responses.

- **Respect people's time**—The *LSAF* should take about an hour to complete. Let the employer know before you begin how long the conversation will take and stay within the limits you set. Before doing your first *LSAF* it is a good ideas to practice with a friend, family member, or colleague to get familiar with setting a pace for the conversation.

- **Relax and have fun**—Although the *LSAF* process is designed to help you gather information related to jobs and workplaces, never lose sight of the fact that it is intended to be a conversation. This is a chance to interact with people in your community and learn new things about the jobs that happen around you every day. Like all conversations, the *LSAF* process is a collaborative one, an opportunity to exchange ideas.

- **Collect written materials to use as student resources**—Employers may mention materials (such as annual reports, training manuals, newsletters, or pamphlets) used at the workplace. If possible, collect samples of these items—they can be useful resources for students interested in learning more about the workplace where you completed the *LSAF*.

- **Take a moment to review your notes**—As you talk with the employer and take notes it may be difficult to write in complete sentences all the time. If you use shorthand and abbreviations to capture what the employer is saying, take a few minutes immediately after completing the *LSAF* to fill in any details while they are still fresh in your mind. If the employer grants permission, you can record the conversation and then refer to the tape to catch any points you missed.

learning site
analysis form

sample learning site analysis forms

This section includes sample *Learning Site Analysis Forms*. To write these samples we completed actual *LSAFs* with veterinarians, electricians, fast-food restaurant managers, and elementary school teachers. While the responses on the forms are authentic, the names of employers and their places of business are fictitious.

Use these samples as reference tools to become acquainted with the type of information you can gather through your *LSAF* conversations with employers.

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Learning Site Analysis Form

Chris Logan
Workplace contact

Veterinarian
Title

The Dogtown Animal Clinic
Organization

Anywhere U.S.A.
Address

###-####
Phone

Kim Wells
School contact

October 8
Date

CONNECTIONS

Tips for completing the Learning Site Analysis Form

The purpose of the *Learning Site Analysis Form (LSAF)* is to identify opportunities for students to learn at a workplace and to connect that experience with learning in school.

The *LSAF* is designed to facilitate a conversation between you (a teacher or other school staff member) and the employer or employee who will be working directly with students. Through the conversation you will gain a broad understanding of how and under what conditions that person does his or her job. And together you will begin to explore different ways students can become active learners both inside and outside the classroom.

Following are tips for making the *LSAF* process go smoothly:

- Let the employer or employee see a copy of the *LSAF* before your scheduled conversation. It will save time if he or she knows what kinds of questions to expect.
- Specify how much time you will need for the meeting before you begin.
- Explain the purpose of the *LSAF*, briefly describing the benefits of students learning at the workplace.
- Before asking questions, read to the employer the directions at the beginning of each section.
- Use the examples and cue words in the margins as prompts to help the conversation run smoothly.
- Remember, this is a conversation. It is a chance to meet new people in your community and exchange ideas about new ways for students to learn.

Part 1 — Your Job

Directions:	The purpose of these questions is to paint a detailed picture of the skills and activities associated with the job.

1) Describe your work environment.

It's a medical clinic...tailored for dogs and cats. We have about 1200 square feet here and a total staff of seven. Of course there are sick animals here, but we work really hard to keep the clinic from smelling "sick"... our clients appreciate that. We dress professionally: white medical smocks, no jeans.

✔ FOR EXAMPLE:

- physical layout
- work atmosphere
- dress code
- number of staff
- stress level

2) What is a typical day at work like?

We open at 7:30 am. The technician is here feeding the animals, giving them medications, or changing bandages. I get in at 9 to do morning treatments and see appointments. Our day is structured by half-hour appointments; on average we see 15 cases per day. We try to stay on schedule, but it's not always possible...there may be a walk-in client or an emergency surgery. Throughout the day, there are lots of interruptions, and always something to do...outpatient treatment, wellness exams, lab work, and a lot of public contact. Lunch is sometime between 11:30 and 1...depending on what's going on. Afternoon appointments begin at 2:30. We close at 5:30 so that we can try to leave between 6:30 and 8.

The most satisfying part about my job is really being able to help pet owners through their crises...the most difficult part is when we have to perform euthanasia. To a certain extent a good vet is a good nurturer. I've even sent flowers to clients after their pets died.

PROBE QUESTIONS:

- What hours do you work?
- What kinds of tasks do you do on a daily basis?
- What kinds of decisions do you make regularly?
- Whom do you interact with on most days?
- Do you generally deal more with people or equipment?
- Do you work independently or as part of a team?
- Can you usually work uninterrupted by meetings, phone calls, or emergencies?
- What is the "rhythm" of your day? When are things busy and when do they slow down?

Your Job cont.

3) What are the five most important responsibilities of your job?

Providing the best medical care possible to the animals

Providing honest advice and answers for the owners

Educating clients (and non-clients) how to make this place a better world for animals

Running a profitable and successful business

Providing a good working atmosphere for the staff

✔ FOR EXAMPLE:

- using tools (e.g., drill, microscope, camera)
- using information (e.g., data analysis, teaching)
- using technology (e.g., software design, word processing)

4) What technical skills do you need to do your job?

Medical and surgical skills—using microscopes, needles, diagnostic equipment, x-rays, ultrasound, and fiber optics. I also use math to determine medication amounts, as well as chemistry and biology. Some vets even use the computer for diagnostic information.

✔ FOR EXAMPLE:

- listening to customers
- being a team player
- resolving conflict
- communicating clearly
- working with diverse people
- teaching others

5) What interpersonal skills do you need to do your job?

I need to be able to give clear directions, I need to teach, and I need to listen. Selecting the right people to be on staff is critical, and that's a skill unto itself. I have to be able to communicate clearly with my clients so that I am assured they understand my diagnosis and what they need to do.

When I work with staff I find myself coaching, mediating, sometimes "managing." I also need to be able to delegate effectively.

✔ FOR EXAMPLE:

- helping others
- adapting to change
- allocating resources
- thinking creatively
- taking a leadership role
- improving systems
- time management
- supervising other people

6) What additional skills and/or personal qualities does your job require?

When dealing with clients, I have to be sensitive to their concerns. It can be a difficult line to walk...animals are like family members to some, property to others. In certain situations, I have to use my judgement about what a family is willing or able to afford. I might have to say, "If this doesn't fit your budget or needs, here's another option." I really have to be able to read people and help them make the right choice.

Your Job cont.

7) How did you acquire the skills you just identified?

Undergraduate school for four years, then another four years of veterinary school...then an internship at an animal clinic for fourteen months. But I had absolutely no training in dealing with people...that came by trial and error...they didn't teach "bedside manner" in college.

To enhance my current skills or gain new ones, I take continuing education classes, attend conferences, and consult with other veterinarians. It's never-ending...

✔ FOR EXAMPLE:

- college courses
- on-the-job training
- self-taught
- apprenticeship
- professional development
- trade journals
- observation
- vendor workshops

8) How could you help a student learn and practice the skills you identified as important to your job in questions #4 through #6?

We could train students in the simpler technical skills, like using a syringe, giving vaccines, using a microscope, or holding an animal for treatment. As far as the people skills, a student would have lots of contact with pet owners. They could watch and listen to how our staff interacts with one another or the clients. That would give them a pretty good picture of what language works...and what doesn't.

℘ PROBE QUESTIONS:

- A student cannot do your job, but what tasks (e.g., data entry, research, drafting a memo) could he or she do to help you in your work?
- What hands-on activities could a student do to get a flavor for your job?

9) Describe a recent problem on the job and how you solved it.

A dog came in that had swallowed a baited hook during a fishing trip. Diagnosis was no problem because the owners saw the dog swallow the thing. They cut the line and left some hanging out of the dog's mouth, but by the time they got him here he had completely chewed the line off. We needed to do an x-ray to see where the fish hook was. It turned out my first guess was completely wrong...the lead weight was down in the small intestines, but no fish hook. So we had to do a second x-ray and found the hook lodged in the top of the throat. We anesthetized the dog, and I and two other technicians were able to remove the hook with a long pair of forceps...we didn't have to do surgery.

℘ PROBE QUESTIONS:

- How did you discover the problem?
- How did you handle it?
- Who else was involved in solving the problem?
- What was the outcome?
- How will you ensure the problem does not recur?

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Your Job cont.

PROBE QUESTIONS:

- Is your job harder if other people don't do their jobs well?
- Do other people rely on your doing your work well?

10) How is your work interdependent with that of others in your organization?

It's important for me to be able to delegate responsibility and know the job will get done...from the person who answers the phone to the person who does x-rays. To help this, I encourage and even pay for continuing education classes for any staff member.

We also have monthly staff meetings...it's a time to touch base, ask questions, voice concerns, whatever. The bottom line is if everyone does their job well, we are efficient and we can handle a larger client volume.

✔ FOR EXAMPLE:

- customer opinions
- stock market trends
- world news
- new technologies
- sales figures

11) What kinds of information do you need to use, analyze, and/or stay up-to-date on to do your job effectively?

We are required by law to do a certain amount of continuing education. Some of that can be in the form of journals and videos, but most comes in the form of conferences and lectures. I also frequently consult with veterinary specialists in the metropolitan area. It's interesting, but you can even learn a lot by referring patients to a specialist...the client comes back and tells you what that specialist said or did and you may learn something new.

✔ FOR EXAMPLE:

- resolving an issue in your field or business
- using different equipment
- rethinking a process
- getting more training

12) What would improve the efficiency of your job?

- Fewer interruptions
- Less turnover
- A more highly-skilled staff
- Easier access to up-to-date information

✔ FOR EXAMPLE:

- new technology introduced
- more education required
- new skills necessary
- greater competition in worldwide marketplace
- more opportunities with an expanded demand for products and services

13) How do you think your job will change over the next 10 years? Why?

Well for one thing, the bigger chains of pet centers are expanding by having vet services on site. Treatment at these places is usually more "standardized" and "efficient," but at the same time more "institutional." Over time, veterinary medicine may lose some of its artistry and personal touch.

Another change will be in technology...there will be an increase in diagnostic information available on computer databases and an ability to quickly "interface" with other professionals.

Part 2 — The Workplace

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Directions: The purpose of these questions is to find out about the workplace environment.

14) What are the health and safety issues at the workplace?

There are lots of health and safety considerations:

- There is no smoking in the clinic due to oxygen use
- OSHA regulations regarding goggles and gloves
- Scared animals can inflict injuries through bites and scratches
- Some animal diseases and parasites are transferable to humans
- Staff can be allergic to animals, dips or shampoos
- Staff can injure their backs when lifting heavy animals

✔ FOR EXAMPLE:

- smoking policy
- drug testing
- labor law age restrictions
- special clothes (smock, uniform, safety shoes)
- special gear (gloves, goggles, hard hat)

15) What technology and special tools are used by you and others at the workplace?

blood analyzer _____ _____

surgical tools _____ _____

x-ray machine _____ _____

fiber optics _____ _____

needles _____ _____

microscopes _____ _____

✔ FOR EXAMPLE:

- computers
- hand tools
- lasers
- scales
- fax machines
- marker boards/flip charts
- cellular phones
- photocopiers
- medical instruments
- calculators

16) What written materials are used at the workplace?

regulatory literature _____ _____

monthly veterinary journals _____ textbooks for diagnosis

forms for ordering lab work _____ reference books for drug doses

_____ _____

✔ FOR EXAMPLE:

- purchase orders
- contracts
- bilingual dictionaries
- maps
- training manuals
- equipment specifications
- federal, state, or local rules and regulations
- directories

The Workplace cont.

PROBE QUESTIONS:

- Who makes decisions about goals and does strategic planning?
- How are resources (e.g., time, money, materials) allocated?
- How are frontline workers involved in decision making?
- How are workers' performances assessed?

17) How is the workplace managed to ensure that it is productive and financially sound?

Since we are a small, one-doctor clinic, we can't compete with the big clinics. Instead we try to work as efficiently as possible and offer more personal attention. Our entire staff is involved in this process...we have quarterly meetings to review our goals and make sure we're "on-track." One of our number-one priorities is to give our clients accurate, honest information and really try to educate them. It's important that we share with them what we're doing and why...we build relationships. In this way we offer something to our clients that the bigger, cheaper clinics don't offer.

PROBE QUESTIONS:

- How does the workplace affect the local economy?
- What zoning laws apply?
- What environmental factors determine how the workplace operates?
- What civic activities is the workplace involved in?

18) What impact does the workplace have on the local and global communities?

Locally, we provide employment and educational opportunities for people, and we contribute to the health and well-being of pets and their families.

We do pro-bono work by donating our services to poor, elderly, and ill members of the neighborhood. By doing this we we not only build good relationships with people in the community, but we also keep the community's animals healthier. We also work with the humane society and refer people to other vets.

Globally, I guess I'd say our recycling efforts. We've been recycling a long time...long before it was "cool." We try to have as little negative impact as possible on the global community...we operate a clean business. We also draw on the global communities for products, especially drugs.

Part 3 — Learning on Site

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Directions: The purpose of these questions is to brainstorm ideas about the ways students can acquire and/or enhance job-related and academic skills at the workplace.

19) What academic skills do you need to do your job?

The three "R's": reading, writing and 'rithmetic. Lots of reading, from journals to dosage information, from junk mail (that may not always be junk!), to notes from my staff. I am always writing reminder notes to my staff, and during/after every pet visit I enter notes in the patient's file. These, of course have to be clear and accurate. Math is critical for any caregiver—a wrong dosage can make the difference between life and death. I also use chemistry, physics, and communication skills quite regularly.

✔ FOR EXAMPLE:

- English to write memos
- math to manage budgets
- chemistry to do lab tests
- geography to create maps

20) What are at least three ways a student could learn or apply mathematics at the workplace?

They could:

- Use basic math and/or algebra to determine medicine doses based on animal weight
- Measure the thickness of an animal's body for x-ray
- Determine appropriate fee-for-service based on staff salary, overhead, and medicine cost
- Project salary expenses for the year based on the number of clients we would like to serve
- Double-check lab billing statements for accuracy

PROBE QUESTIONS:

- In what ways are basic computation (addition, subtraction, multiplication) and numerical concepts (fractions, decimals, percentages) a part of your job or the jobs of others at the workplace?
- Could a student use math skills to do tasks such as estimate, prepare graphs, help with inventory?

Learning on Site cont.

✔ FOR EXAMPLE:

- composing memos or letters
- editing documents
- public speaking
- synthesizing data
- greeting customers
- taking messages

21) What are at least three ways a student could learn or apply communication skills at the workplace?

A student could:

- Answer phones, route calls, make appointments
- Draft a letter to a client or vendor
- Discuss the status of an animal with other staff members
- Record patient information
- Write/design a newspaper ad for the clinic
- Create an educational bulletin board or newsletter

✔ FOR EXAMPLE:

- A student at a veterinarian's office might investigate the effects of pet ownership on a person's health and sense of well-being.
- At a computer software design firm a student could research the impact of electronic communication on the printing industry.
- At a dairy farm a student might research the the impact health trends have had on milk consumption.
- At a carpentry shop a student could investigate how world markets are changing lumber specifications.

22) What are at least three ways a student could explore social issues at the workplace to understand important aspects of your job or industry?

A student could:

- Research the history of veterinary medicine
- Do a historical comparison between human medicine and animal medicine
- Investigate the importance of the human/animal bond
- Investigate ethical questions in animal medicine (animal research)

Learning on Site cont.

23) What are at least three ways a student could learn or apply scientific principles or concepts underlying your work?

A student could:

- Study the effects of medicated shampoo on skin
- Evaluate stool samples for parasites
- Investigate why the same type of animal may react differently to a certain drug (what are the differentiating factors?)

✔ FOR EXAMPLE:

- A student at an office could study the health risks of prolonged use of computer keyboards.
- At an auto repair shop a student could examine car construction to establish which features are needed to protect passengers in side-impact accidents.
- A student at a fast-food restaurant could explore the chemical processes of the body that break down and store fat.

24) What opportunities are there for students to contribute to a creative or artistic process or product at the workplace?

They could:

- Create a newsletter
- Create an educational display
- Draw the anatomy of a selected animal
- Help choose art to display in the waiting area
- Design a new outdoor sign for the clinic

✔ FOR EXAMPLE:

- In a retail store a student could examine how presentation and lighting affect people's interest in shopping.
- At a day-care center, a student could help produce a newsletter to parents.
- A student at a parts manufacturer could help create overheads for a presentation to potential clients.

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Learning on Site cont.

✔ FOR EXAMPLE:

- In a doctor's office, where there is frequent turnover in receptionists, a student could develop a training manual to orient new staff to the computer and record-keeping system.
- At a bakery, a student could organize and oversee the donation of day-old bread and pastries to local homeless shelters.
- At a bookstore, a student could design and produce a flyer announcing a new lecture series.

25) If a student were at your workplace to help you, what kinds of projects could you involve him or her in?

A student could:

- Write a computer manual for new staff that explains our billing system
- Redecorate exam room #1. . . select the color scheme, get wall paper samples and cost estimates for materials and labor
- Design an inventory system for our drugs and medical supplies
- Reorganize/update our filing system
- Design a template for our quarterly newsletter
- Produce one or more of our quarterly newsletters
- Design an educational bulletin board for our clients which highlights a specific treatment option
- Design a business-card-size ad for our community newspaper

Notes...

Dr. Logan runs a small, one-doctor clinic staffed with several technicians. During our interview there were several interruptions:

- We stopped long enough for the doctor to look at a dog brought in for a follow-up consultation.

- Twice technicians poked their heads in to ask questions about animals they were trying to x-ray.

- At one point Dr. Logan stopped the interview to check on a cat having difficulty breathing while under anesthesia.

Dr. Logan says these kinds of interruptions are typical of the work.

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Learning Site Analysis Form

Pat Johnson
Workplace contact

Electrician
Title

Light Source
Organization

Anywhere U.S.A.
Address

###-####
Phone

Guadalupe Garcia
School contact

October 9
Date

Tips for completing the Learning Site Analysis Form

The purpose of the *Learning Site Analysis Form (LSAF)* is to identify opportunities for students to learn at a workplace and to connect that experience with learning in school.

The *LSAF* is designed to facilitate a conversation between you (a teacher or other school staff member) and the employer or employee who will be working directly with students. Through the conversation you will gain a broad understanding of how and under what conditions that person does his or her job. And together you will begin to explore different ways students can become active learners both inside and outside the classroom.

Following are tips for making the *LSAF* process go smoothly:

- Let the employer or employee see a copy of the *LSAF* before your scheduled conversation. It will save time if he or she knows what kinds of questions to expect.
- Specify how much time you will need for the meeting before you begin.
- Explain the purpose of the *LSAF*, briefly describing the benefits of students learning at the workplace.
- Before asking questions, read to the employer the directions at the beginning of each section.
- Use the examples and cue words in the margins as prompts to help the conversation run smoothly.
- Remember, this is a conversation. It is a chance to meet new people in your community and exchange ideas about new ways for students to learn.

Part 1—Your Job

Directions:	The purpose of these questions is to paint a detailed picture of the skills and activities associated with the job.

1) Describe your work environment.

Our work environment is either inside an existing building or one that is being built. We wear jeans and work clothes, sometimes hard hats. If we are working outside then we make sure we have appropriate gear like rain coats and boots. The stress level varies from low to high. It can get quite stressful when we've got someone's power cut off and find that we can't turn it on because of some glitch. Working with live wires and climbing on ladders are also stressful at times.

Sometimes working outside can get cold and wet and downright uncomfortable. But it can be pleasant when we get out on the nice days.

✔ FOR EXAMPLE:

- physical layout
- work atmosphere
- dress code
- number of staff
- stress level

2) What is a typical day at work like?

We work from 7:00 am to 3:30 pm with a half-hour lunch break. We usually work overtime only when there is an emergency. We can handle from one to five jobs in a day, depending on how complex they are. We are always getting calls on our pager that we have to respond to. Some days we dig ditches and other days we do tenant work installing new outlets.

We try to work when others are not around so we don't bother them. On some house jobs there are families around. We maintain a balance between being friendly and unobtrusive. Most people are nice, but we have to be friendly no matter what.

Jobs can take anywhere from one to 10 hours. At the end of some days you're just bone tired. It depends on the kind of work we did and the weather. During storms we work long hours responding to emergencies. You can't say "no" to a family without power.

PROBE QUESTIONS:

- What hours do you work?
- What kinds of tasks do you do on a daily basis?
- What kinds of decisions do you make regularly?
- Whom do you interact with on most days?
- Do you generally deal more with people or equipment?
- Do you work independently or as part of a team?
- Can you usually work uninterrupted by meetings, phone calls, or emergencies?
- What is the "rhythm" of your day? When are things busy and when do they slow down?

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Your Job cont.

3) What are the five most important responsibilities of your job?

Doing quality work safely

Doing clean work and cleaning up after jobs

Making sure I have the right materials

Communicating clearly so everyone understands what I am doing and why

Being punctual—getting things done in a timely manner

✔ FOR EXAMPLE:

- using tools (e.g., drill, microscope, camera)
- using information (e.g., data analysis, teaching)
- using technology (e.g., software design, word processing)

4) What technical skills do you need to do your job?

- Ability to read and understand the code book
- Measuring skills
- Drilling skills (in metal and wood) and ability to use hole saw, conduit bender, ground rod driver, and hand tools like wire strippers and pliers
- Ability to make simple line drawings for a site plan
- Ability to read blueprints and understand principles of drafting

✔ FOR EXAMPLE:

- listening to customers
- being a team player
- resolving conflict
- communicating clearly
- working with diverse people
- teaching others

5) What interpersonal skills do you need to do your job?

I need to be a good listener and ask questions so that I'll know what the job entails. I need to be very clear about what I'm doing and why I'm doing it. I have to know how to cooperate with clients and other workers. And as a member of the union, I have to able to explain things to people learning the trade in our apprenticeship program.

✔ FOR EXAMPLE:

- helping others
- adapting to change
- allocating resources
- thinking creatively
- taking a leadership role
- improving systems
- time management
- supervising other people

6) What additional skills and/or personal qualities does your job require?

- Patience
- Creativity—the blueprints just tell us where to put outlets. We have to rely on our experience and judgment to come up with creative solutions to the problems that arise daily.

Your Job cont.

7) How did you acquire the skills you just identified?

The interpersonal skills I learned from trail and error, from experience. The technical skills involved special training. To be an electrician, you apply to the union. If they accept your application, you work five years under a senior electrician as an apprentice. You also have to take the union's five-year school program. At the end of your training, you have to take a three-hour state test. You also have to take eight hours of union classes a year to keep your license current.

✔ FOR EXAMPLE:

- college courses
- on-the-job training
- self-taught
- apprenticeship
- professional development
- trade journals
- observation
- vendor workshops

8) How could you help a student learn and practice the skills you identified as important to your job in questions #4 through #6?

- Loading equipment (they would learn about the tools I use)
- Watching me work—standing right over my shoulder and observing, just the same as a first-year apprentice
- There are some tools I couldn't let a student use, but they could help me do a lot

℘ PROBE QUESTIONS:

- A student cannot do your job, but what tasks (e.g., data entry, research, drafting a memo) could he or she do to help you in your work?
- What hands-on activities could a student do to get a flavor for your job?

9) Describe a recent problem on the job and how you solved it.

Last month, I got called on a circuit that had blown on a rainy night. That was my only clue about the cause of the problem. I took off the panel, turned the breaker on and heard this horrible crackling. I immediately turned it off and when I took it out discovered water all over the bottom of the breaker box. I had to replace the breaker and find the leak. When I was finished, I explained to the customer how to prevent this from happening again.

℘ PROBE QUESTIONS:

- How did you discover the problem?
- How did you handle it?
- Who else was involved in solving the problem?
- What was the outcome?
- How will you ensure the problem does not recur?

Your Job cont.

PROBE QUESTIONS:

- Is your job harder if other people don't do their jobs well?
- Do other people rely on your doing your work well?

10) How is your work interdependent with that of others in your organization?

We have to coordinate with other trades workers when a structure is being remodeled or built. If the carpenters, plumbers, and sheet metal workers don't do their jobs well, we can't either. Sometimes others are waiting for an inspection of my work and I have to communicate about that.

✔ FOR EXAMPLE:

- customer opinions
- stock market trends
- world news
- new technologies
- sales figures

11) What kinds of information do you need to use, analyze, and/or stay up-to-date on to do your job effectively?

- Information about new products—I read the displays in stores and talk to clerks
- I talk with other electricians to stay current
- I talk to brokers of materials
- I read the *Annual National Electrical Code Book* because national codes change every three years

✔ FOR EXAMPLE:

- resolving an issue in your field or business
- using different equipment
- rethinking a process
- getting more training

12) What would improve the efficiency of your job?

It would help us if we had all the updated blueprints for a job before we start. Sometime we do a job and then we have to do it all over because we were not informed by the architect that there were changes. More training sessions with the union would help us stay current on the latest technologies.

✔ FOR EXAMPLE:

- new technology introduced
- more education required
- new skills necessary
- greater competition in worldwide marketplace
- more opportunities with an expanded demand for products and services

13) How do you think your job will change over the next 10 years? Why?

We'll see different code requirements which will affect what electricians will install. For example, in the future the codes may specify five smoke detectors instead of three. We are constantly having to change the way we think on the job to keep up with new technologies. I think we will definitely see more communications wiring—for computers, printers and home theaters.

Part 2—The Workplace

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Directions: The purpose of these questions is to find out about the workplace environment.

14) What are the health and safety issues at the workplace?

Electrocution. You have to make sure your job site is safe; you test and cover live wires. Ladders are a concern. You need good boots to protect your feet at a worksite. A dust mask is very important when you're around insulation. You need protective eyewear. We have random, mandatory drug testing (we get paid $50 to take the test and 24-hour notice). You have to be careful not to trip over things; you have to stay alert. You're always in danger of cutting yourself. It's a good idea to know first aid. Actually, CPR is required in my profession.

✔ FOR EXAMPLE:

- smoking policy
- drug testing
- labor law age restrictions
- special clothes (smock, uniform, safety shoes)
- special gear (gloves, goggles, hard hat)

15) What technology and special tools are used by you and others at the workplace?

voltage tester _____ _____

pager _____ _____

hand tools _____ _____

_____ _____

_____ _____

_____ _____

✔ FOR EXAMPLE:

- computers
- hand tools
- lasers
- scales
- fax machines
- marker boards/flip charts
- cellular phones
- photocopiers
- medical instruments
- calculators

16) What written materials are used at the workplace?

code books _____ _____

blueprints _____ _____

equipment manuals _____ _____

_____ _____

_____ _____

✔ FOR EXAMPLE:

- purchase orders
- contracts
- bilingual dictionaries
- maps
- training manuals
- equipment specifications
- federal, state, or local rules and regulations
- directories

The Workplace cont.

PROBE QUESTIONS:

- Who makes decisions about goals and does strategic planning?
- How are resources (e.g., time, money, materials) allocated?
- How are frontline workers involved in decision-making?
- How are workers' performances assessed?

17) How is the workplace managed to ensure that it is productive and financially sound?

We get a lot of business by keeping our prices competitive. We do good work and people call us back. We organize our jobs so that we have the right number of people to do the work, not too few and not too many.

Unfortunately, if someone just doesn't do the work well, they are let go. We have to maintain our reputation. Evaluations are done yearly.

PROBE QUESTIONS:

- How does the workplace affect the local economy?
- What zoning laws apply?
- What environmental factors determine how the workplace operates?
- What civic activities are the workplace involved in?

18) What impact does the workplace have on the local and global communities?

We help support the use of electricity which, in the Northwest, is a fairly clean source of energy.

The company contributes to sports events of employees' kids. Even though we are a small company, we try to be active in our community, like being part of the neighborhood association.

We are careful about disposal of materials like extra wiring.

Part 3—Learning on Site

A

analyze

Directions: The purpose of these questions is to brainstorm ideas about the ways students can acquire and/or enhance job-related and academic skills at the workplace.

19) What academic skills do you need to do your job?

You have to have basic math and high school algebra. You need to know how to add and subtract fractions, do calculations and some trigonometry. You need to be able to write letters to other companies to clarify their building intentions. You also need good reading skills.

✔ FOR EXAMPLE:

- English to write memos
- math to manage budgets
- chemistry to do lab tests
- geography to create maps

20) What are at least three ways a student could learn or apply mathematics at the workplace?

- Measuring—they could measure angles and spaces so when they put pieces of pipe in a wall, it fits the first time
- Doing load calculations
- Figuring formulas and fractions—they could bend pipes to fit in spaces. . .to do that they would have to use fractions

PROBE QUESTIONS:

- In what ways are basic computation (addition, subtraction, multiplication) and numerical concepts (fractions, decimals, percentages) a part of your job or the jobs of others at the workplace?
- Could a student use math skills to do tasks such as estimate, prepare graphs, help with inventory?

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Learning on Site cont.

✔ FOR EXAMPLE:

- composing memos or letters
- editing documents
- public speaking
- synthesizing data
- greeting customers
- taking messages

21) What are at least three ways a student could learn or apply communication skills at the workplace?

- Listening to the client and paraphrasing client concerns
- Watching the boss talk with clients and other companies. You need to know how to communicate your point to carpenters or plumbers without getting them mad at you. You don't want to make other contractors angry or they will make your life miserable.
- Practicing writing up a contract

✔ FOR EXAMPLE:

- A student at a veterinarian's office might investigate the effects of pet ownership on a person's health and sense of well-being.
- At a computer software design firm a student could research the impact of electronic communication on the printing industry.
- At a dairy farm a student might research the the impact health trends have had on milk consumption.
- At a carpentry shop a student could investigate how world markets are changing lumber specifications.

22) What are at least three ways a student could explore social issues at the workplace to understand important aspects of your job or industry?

Students could study power generation, including nuclear power plants and alternative power technologies. They could look at how power is delivered and evaluate the environmental consequences of electricity. Our job is directly linked to the economy; a student could study the electrical technologies that drive the economy.

Learning on Site cont.

23) What are at least three ways a student could learn or apply scientific principles or concepts underlying your work?

Everything we do involves science—from the filament in a light bulb to how electricity is conducted.

Students could:

- Study the code book and electrical theory
- Learn how we never connect dissimilar metals and always use special connectors
- Practice drilling holes and discover the best way to fasten or unfasten—this is basic physics

✔ FOR EXAMPLE:

- A student at an office could study the health risks of prolonged use of computer keyboards.
- At an auto repair shop a student could examine car construction to establish which features are needed to protect passengers in side-impact accidents.
- A student at a fast-food restaurant could explore the chemical processes of the body that break down and store fat.

24) What opportunities are there for students to contribute to a creative or artistic process or product at the workplace?

- Placing lighting fixtures so that they are aesthetically pleasing and symmetrical
- Considering colors and how light falls in a room
- Contributing to the union newsletter
- A student could even take photographs that show a job before and after it is completed

✔ FOR EXAMPLE:

- In a retail store a student could examine how presentation and lighting affect people's interest in shopping.
- At a day care center, a student could help produce a newsletter to parents.
- A student at a parts manufacturer could help create overheads for a presentation to potential clients.

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Learning on Site cont.

✔ FOR EXAMPLE:

- In a doctor's office, where there is frequent turnover in receptionists, a student could develop a training manual to orient new staff to the computer and record keeping system.
- At a bakery, a student could organize and oversee the donation of day-old bread and pastries to local homeless shelters.
- At a bookstore, a student could design and produce a flyer announcing a new lecture series.

25) If a student were at your workplace to help you, what kinds of projects could you involve him or her in?

Maybe a student could make a funny manual for first year apprentice students with pictures of all the tools and their various names. Students could ask certified electricians what they call things and then make a dictionary out of it. Students who came along later could update the dictionary.

A student could come with me on an initial consultation for a job, list the necessary materials, research prices, help me estimate items, add up costs, and write a bid.

A student could write for the shop newsletter.

As I started to mention before, a student could document a job by keeping journal entries and taking photographs. I could use a photo essay of my work; you know, a pictorial sequence of what I do and how it looks when I'm done.

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Notes...

Pat Johnson works for a small company. To understand the variety of work experiences available in the field, students should talk to a self-employed electrician and one who works for a large company .

Pat was enthusiastic about being a mentor for students and teaching young people about the profession.

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Learning Site Analysis Form

P.J. Rosen
Workplace contact

Shift Supervisor
Title

Fancy Fries Restaurant
Organization

Anywhere U.S.A.
Address

###-####
Phone

Kaye Planchard
School contact

October 10
Date

CONNECTIONS

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Tips for completing the Learning Site Analysis Form

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- Let the employer or employee see a copy of the *LSAF* before your scheduled conversation. It will save time if he or she knows what kinds of questions to expect.
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- Before asking questions, read to the employer the directions at the beginning of each section.
- Use the examples and cue words in the margins as prompts to help the conversation run smoothly.
- Remember, this is a conversation. It is a chance to meet new people in your community and exchange ideas about new ways for students to learn.

Part 1—Your Job

A

analyze

Directions:	The purpose of these questions is to paint a detailed picture of the skills and activities associated with the job.

1) Describe your work environment.

We have 25 employees. There are usually four of us on the breakfast shift, 10 at lunch, and five or six at dinner. We all wear uniforms.

As far as the relationship between staff and guest, it's real comfortable. Many of our customers are "regulars" and we're on a first-name basis...we talk to them about their work, their family. As for the staff, most of us get along pretty well. But we know when we're at work, it's work. And when we're off work, then it can get social.

There is always something to do around here. Help customers, wash dishes, check the dining area...the workplace is very demanding.

✔ FOR EXAMPLE:

- physical layout
- work atmosphere
- dress code
- number of staff
- stress level

2) What is a typical day at work like?

I usually put in 11 to 12 hours a day. That includes phone calls and the times I have to go back in to solve a problem. I interact mostly with people...both the public and my employees. I handle customer complaints and monitor the employees' performance while on shift. It's my job to make sure a worker is doing the job he or she is best suited to do.

Other things I do during a typical day include making sure employees follow safe food-handling practices and sanitation. This means I'm always checking pots and pans to see if they are properly cleaned before reuse and checking food to make sure it is used by the expiration date. I'm also responsible for scheduling employees and ordering food.

Team structure is extremely important around here, but I still make a lot of independent decisions. I have to be detail-oriented, yet flexible...the job is filled with constant interruptions.

℘ PROBE QUESTIONS:

- What hours do you work?
- What kinds of tasks do you do on a daily basis?
- What kinds of decisions do you make regularly?
- Whom do you interact with on most days?
- Do you generally deal more with people or equipment?
- Do you work independently or as part of a team?
- Can you usually work uninterrupted by meetings, phone calls, or emergencies?
- What is the "rhythm" of your day? When are things busy and when do they slow down?

A

analyze

Your Job cont.

3) What are the five most important responsibilities of your job?

Managing food costs

Managing labor (both the costs and behavior of employees)

Speed/quality of service

Bookkeeping (expenses, bank deposits, employee benefits)

Overseeing quality of the food

✔ FOR EXAMPLE:

- using tools (e.g., drill, microscope, camera)
- using information (e.g., data analysis, teaching)
- using technology (e.g., software design, word processing)

4) What technical skills do you need to do your job?

- Basic computer skills to take customers' orders, order food/supplies and track those costs
- Skills to operate food-service equipment (slicer, steamer, fryer, grill)
- Information-processing skills to analyze food costs, and interpret health and safety materials

✔ FOR EXAMPLE:

- listening to customers
- being a team player
- resolving conflict
- communicating clearly
- working with diverse people
- teaching others

5) What interpersonal skills do you need to do your job?

Customer-service skills are a must! When I'm dealing with customers it's three-parts listening to one-part negotiation. It's also a similar thing when I resolve conflicts between employees: listen, negotiate. I have to work with diversity, too, in my crew and with my customers. I also have to have teaching skills to train others in store policy and procedures, and how to use equipment.

✔ FOR EXAMPLE:

- helping others
- adapting to change
- allocating resources
- thinking creatively
- taking a leadership role
- improving systems
- time management
- supervising other people

6) What additional skills and/or personal qualities does your job require?

People skills/patience/dedication/adapting to change/dealing with prejudice/troubleshooting.

It's critical that I stay on top of things, and be willing to go the extra mile. If someone returns with a bag of food in their hand, I know there's a problem. I approach them first and smile. The whole time I'm thinking, "I know I can make this right."

Your Job cont.

A

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7) How did you acquire the skills you just identified?

When I was in high school I worked part time in a fast-food restaurant after school. Back then it was just a job, but I guess it gave me a lot of background for what I'm doing now. I would also have to say I acquired skills through on-the-job training, safety classes, and definitely observation. Many of the skills I have were self-taught as well. But that really takes self-motivation, not to mention time. When you're trying to improve yourself...it's constant looking, listening, thinking.

✔ FOR EXAMPLE:

- college courses
- on-the-job training
- self-taught
- apprenticeship
- professional development
- trade journals
- observation
- vendor workshops

8) How could you help a student learn and practice the skills you identified as important to your job in questions #4 through #6?

A student could greet customers or take orders to practice customer service. Another big part of customer service is dealing with difficult customers. It wouldn't be right for a student to handle that kind situation without proper training, but he or she could observe how we resolve such problems, and then maybe suggest alternative solutions. A student could work on teamwork skills by interacting with other employees. There are also some machines, like the register, that a student could learn to operate to pick up some of the technical skills.

℘ PROBE QUESTIONS:

- A student cannot do your job, but what tasks (e.g., data entry, research, drafting a memo) could he or she do to help you in your work?
- What hands-on activities could a student do to get a flavor for your job?

9) Describe a recent problem on the job and how you solved it.

There was a customer with a complaint. It wasn't someone I had served, but I still had to handle it. The customer came through the drive-through and ordered 10 tacos. She then came into the store and said she paid for 16 but only received 10. She demanded a refund, and since her tacos were cold by that point, she also wanted 16 new tacos. Her receipt showed she paid for 10, but I refunded her money and remade the order for free (16 tacos). Around here "the customer is always right."

This type of thing happens about twice a month. I documented the incident while the situation was still fresh in my mind, because I didn't want it to appear to my managers that the employees were stealing.

℘ PROBE QUESTIONS:

- How did you discover the problem?
- How did you handle it?
- Who else was involved in solving the problem?
- What was the outcome?
- How will you ensure the problem does not recur?

A

analyze

Your Job cont.

℘ PROBE QUESTIONS:

- Is your job harder if other people don't do their jobs well?
- Do other people rely on your doing your work well?

10) How is your work interdependent with that of others in your organization?

My staff relies on me to supervise during peak hours so things run smoothly. I keep my eyes open to make sure safe food-handling procedures are being observed and I'm the one that "rights" the orders that turned out wrong.

My success is dependent on the efficiency of each member of the crew. One weak link makes it hard for everyone else, especially me.

✔ FOR EXAMPLE:

- customer opinions
- stock market trends
- world news
- new technologies
- sales figures

11) What kinds of information do you need to use, analyze, and/or stay up-to-date on to do your job effectively?

Oh, there are tons of laws I need to stay up-to-date on...food safety laws, child labor laws, immigration laws, corporate policy. And every month we do promotions, so I need to review and analyze employee performance evaluations. There are also the day-to-day issues I need to keep up on, like employees' personal safety, and making sure policies related to that are enforced.

✔ FOR EXAMPLE:

- resolving an issue in your field or business
- using different equipment
- rethinking a process
- getting more training

12) What would improve the efficiency of your job?

I would have to say developing and maintaining a "team" atmosphere. Right now we don't have regular meetings for staff...I think having meetings would definitely improve the efficiency.

A lot of young people who come to work in fast-food restaurants don't really know how to work hard. That hurts, at least slows down, business.

✔ FOR EXAMPLE:

- new technology introduced
- more education required
- new skills necessary
- greater competition in worldwide marketplace
- more opportunities with an expanded demand for products and services

13) How do you think your job will change over the next 10 years? Why?

I think everything will be more computerized and automated. For instance, now we don't "cook" food anymore, we "steam" it. In ten years I don't think we'll even have knives in the kitchen... machines will chop vegetables.

Part 2 — The Workplace

A

analyze

Directions: The purpose of these questions is to find out about the workplace environment.

14) What are the health and safety issues at the workplace?

There is no smoking, we don't drug test, and child labor laws do apply. We wear uniforms and safety shoes. We have to wear hair restraints...only one ring per finger...you can only wear one pair of stud earrings...you have to use a band-aid from our first aid kit for any kind of cut. There are lots of restrictions!

As far as safety, safe food handling is a big consideration. Making sure employees are using safe food-handling practices takes up a large part of my time. We really stress hand-washing around here. There are signs everywhere and we even have a video about it.

✔ FOR EXAMPLE:

- smoking policy
- drug testing
- labor law age restrictions
- special clothes (smock, uniform, safety shoes)
- special gear (gloves, goggles, hard hat)

15) What technology and special tools are used by you and others at the workplace?

cash register	heating cabinet
food timer	microwave oven
refrigerator/freezer	equipment monitor
heating & steam cabinets	
ten-key	
tomato slicer	

✔ FOR EXAMPLE:

- computers
- hand tools
- lasers
- scales
- fax machines
- marker boards/flip charts
- cellular phones
- photocopiers
- medical instruments
- calculators

16) What written materials are used at the workplace?

food order	orientation package
day-off request	
safety manual	
food prep guide	

All written materials are in both English and Spanish.

✔ FOR EXAMPLE:

- purchase orders
- contracts
- bilingual dictionaries
- maps
- training manuals
- equipment specifications
- federal, state, or local rules and regulations
- directories

A

analyze

The Workplace cont.

PROBE QUESTIONS:

- Who makes decisions about goals and does strategic planning?
- How are resources (e.g., time, money, materials) allocated?
- How are frontline workers involved in decisionmaking?
- How are workers' performances assessed?

17) How is the workplace managed to ensure that it is productive and financially sound?

The market managers set goals and do planning for the region. Then the general managers and the assistant managers carry out those plans. The front-line people really aren't involved in decisionmaking...it's a top-down thing.

It is the front-line workers' responsibility to make sure customers are happy and that they come back...so, I guess that helps to make sure the company is productive and makes money.

PROBE QUESTIONS:

- How does the workplace affect the local economy?
- What zoning laws apply?
- What environmental factors determine how the workplace operates?
- What civic activities is the workplace involved in?

18) What impact does the workplace have on the local and global communities?

Well, for starters, our company provides jobs for teenagers in the community. We also give charitable contributions. For instance, we'll provide free lunches to kids who come downtown for a field trip or we'll provide free food cards to non-profits who are fundraising.

Our company is worldwide, so I guess that means we influence eating habits everywhere.

Part 3—Learning on Site

A

analyze

Directions: The purpose of these questions is to brainstorm ideas about the ways students can acquire and/or enhance job-related and academic skills at the workplace.

19) What academic skills do you need to do your job?

- Math to manage the budget and make projections
- Science skills regarding food safety (managing proper temperatures, disease prevention and recognizing symptoms, etc.)
- English and Spanish for communication with customers and employees, reading workplace materials, writing orders by hand when the computer system goes down
- Geography for giving customers directions

✔ FOR EXAMPLE:

- English to write memos
- math to manage budgets
- chemistry to do lab tests
- geography to create maps

20) What are at least three ways a student could learn or apply mathematics at the workplace?

A student could:

- Count out proper change for a customer
- Do percentage discount on purchase
- Balance out the till
- Determine food quantities needed for peak periods
- Estimate costs for starting a new franchise across town

ρ PROBE QUESTIONS:

- In what ways are basic computation (addition, subtraction, multiplication) and numerical concepts (fractions, decimals, percentages) a part of your job or the jobs of others at the workplace?
- Could a student use math skills to do tasks such as estimate, prepare graphs, help with inventory?

A

analyze

Learning on Site cont.

✔ FOR EXAMPLE:

- composing memos or letters
- editing documents
- public speaking
- synthesizing data
- greeting customers
- taking messages

21) What are at least three ways a student could learn or apply communication skills at the workplace?

A student could:

- Greet customers
- Take an order and communicate it to the cook
- Learn how to deal effectively with difficult customers
- Observe conflict resolutions between employees
- Write a memo to staff about the holiday schedule

✔ FOR EXAMPLE:

- A student at a veterinarian's office might investigate the effects of pet ownership on a person's health and sense of well-being.
- At a computer software design firm a student could research the impact of electronic communication on the printing industry.
- At a dairy farm a student might research the the impact health trends have had on milk consumption.
- At a carpentry shop a student could investigate how world markets are changing lumber specifications.

22) What are at least three ways a student could explore social issues at the workplace to understand important aspects of your job or industry?

A student could:

- Explore company history through our training manual and videotapes
- Investigate how people's lifestyles (working more, single parenting) influence how much fast food they consume
- Investigate if and how the American health-food craze has had an impact on the fast-food industry

Learning on Site cont.

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23) What are at least three ways a student could learn or apply scientific principles or concepts underlying your work?

A student could:

- Study for and obtain a food-handler's card
- Explore food temperature/safety issues (fungus that can grow on food, E.coli, etc.)
- Investigate fat/protein/salt content of food in relation to what is healthy
- Study food poisoning issues/prevention/cure

✔ FOR EXAMPLE:

- A student at an office could study the health risks of prolonged use of computer keyboards.
- At an auto repair shop a student could examine car construction to establish which features are needed to protect passengers in side-impact accidents.
- A student at a fast-food restaurant could explore the chemical processes of the body that break down and store fat.

24) What opportunities are there for students to contribute to a creative or artistic process or product at the workplace?

They could come up with a promotional deal or design a child play area.

✔ FOR EXAMPLE:

- In a retail store a student could examine how presentation and lighting affect people's interest in shopping.
- At a day care center, a student could help produce a newsletter to parents.
- A student at a parts manufacturer could help create overheads for a presentation to potential clients.

Learning on Site cont.

✔ FOR EXAMPLE:

- In a doctor's office, where there is frequent turnover in receptionists, a student could develop a training manual to orient new staff to the computer and record-keeping system.
- At a bakery, a student could organize and oversee the donation of day-old bread and pastries to local homeless shelters.
- At a bookstore, a student could design and produce a flyer announcing a new lecture series.

25) If a student were at your workplace to help you, what kinds of projects could you involve him or her in?

A student could analyze the nutritional value of the menu items to determine which ones could be approved to wear the American Heart Association's healthy food symbol. They could then submit a proposal to the American Heart Association for the selected item to be approved.

A student could research E.coli causes and cures.

A student could research the history of franchises and write a flyer for people who are interested in starting one. People often walk in the door and ask about it and I don't have any information to give them.

Notes...

P.J. has worked at the restaurant for six years and began as a "crew person."

The LSAF was completed on very short notice at the restaurant. There were a couple of interruptions because we did the LSAF at the end of a rush.

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Learning Site Analysis Form

Sal Martinez
Workplace contact

Elementary Teacher
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Eastdale Elementary School
Organization

Anywhere U.S.A.
Address

###-####
Phone

Nick Robertson
School contact

October 11
Date

CONNECTIONS
LINKING WORK AND LEARNING

72

Tips for completing the Learning Site Analysis Form

The purpose of the *Learning Site Analysis Form (LSAF)* is to identify opportunities for students to learn at a workplace and to connect that experience with learning in school.

The *LSAF* is designed to facilitate a conversation between you (a teacher or other school staff member) and the employer or employee who will be working directly with students. Through the conversation you will gain a broad understanding of how and under what conditions that person does his or her job. And together you will begin to explore different ways students can become active learners both inside and outside the classroom.

Following are tips for making the *LSAF* process go smoothly:

- Let the employer or employee see a copy of the *LSAF* before your scheduled conversation. It will save time if he or she knows what kinds of questions to expect.
- Specify how much time you will need for the meeting before you begin.
- Explain the purpose of the *LSAF*, briefly describing the benefits of students learning at the workplace.
- Before asking questions, read to the employer the directions at the beginning of each section.
- Use the examples and cue words in the margins as prompts to help the conversation run smoothly.
- Remember, this is a conversation. It is a chance to meet new people in your community and exchange ideas about new ways for students to learn.

Part 1 — Your Job

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Directions: The purpose of these questions is to paint a detailed picture of the skills and activities associated with the job.

1) Describe your work environment.

This is a very pleasant place to work...it's very positive. Co-workers and parents are friendly, caring...that sets the tone for the kids.

As far as my class environment, I can lay the room out the way I want. The desks are in clusters, not rows...there are a reading area and a computer center. The students' art and writing really "make" my classroom. Each teacher has their own way of setting things up.

The job can be stressful at times. The worst stress is seeing students who are struggling and not having the time to help them all. I may want to work with a student on writing after school, but I can't because I have a staff meeting. Knowing kids need me and not having time to help them, that haunts me.

✔ FOR EXAMPLE:

- physical layout
- work atmosphere
- dress code
- number of staff
- stress level

2) What is a typical day at work like?

I usually spend around 12 hours a day on school-related things. I get here at seven and set up and get ready for the day. If this is any insight into a "typical" day... when I get here in the morning my desk is completely clean; within an hour you can't see it.

During the day I meet the needs of the kids. I take attendance, do a lunch count, the kids might do silent reading for 15 minutes. Then we'll do a group grammar exercise. Some days I have lunch duty...that's when my conflict-resolution skills really kick in.

It seems like I'm always counting minutes...pacing myself. I'm constantly thinking...how am I going to fit this thing in? It's really important to me that I make every minute count.

After school there are meetings to attend and planning to do. Then when I get home, I'm working on homework.

PROBE QUESTIONS:

- what hours do you work?
- what kinds of tasks do you do on a daily basis?
- what kinds of decisions do you make regularly?
- whom do you interact with on most days?
- Do you generally deal more with people or equipment?
- Do you work independently or as part of a team?
- Can you usually work uninterrupted by meetings, phone calls, or emergencies?
- what is the "rhythm" of your day? When are things busy and when do they slow down?

A

analyze

Your Job cont.

3) What are the five most important responsibilities of your job?

Providing the kids with a safe physical and emotional environment
Boosting the kids' self-esteem by helping them realize their strengths
Challenging kids and "stretching" them as far as they can go
Communicating with parents/guardians
Ensuring every child is a success in my classroom

✔ FOR EXAMPLE:

- using tools (e.g., drill, microscope, camera)
- using information (e.g., data analysis, teaching)
- using technology (e.g., software design, word processing)

4) What technical skills do you need to do your job?

I need to be able to operate a computer and various software programs, a VCR, an overhead projector, and a copy machine.

✔ FOR EXAMPLE:

- listening to customers
- being a team player
- resolving conflict
- communicating clearly
- working with diverse people
- teaching others

5) What interpersonal skills do you need to do your job?

Interpersonal skills are critical. Communicating with others—colleagues, parents, students—is very high on the list. This means verbal communication, but it also involves listening—a lot! I rely quite heavily on my conflict resolution skills, too.

In today's classroom it is essential that you value diversity like differences in cultures, economic backgrounds, and personalities.

✔ FOR EXAMPLE:

- helping others
- adapting to change
- allocating resources
- thinking creatively
- taking a leadership role
- improving systems
- time management
- supervising other people

6) What additional skills and/or personal qualities does your job require?

You have to be flexible, and you have to understand this is not an eight-to-five job. You also have to like kids. You have to really enjoy them and respect them to be a successful teacher. I think it helps to have a sense of humor too...kids are funny and things don't always go the way you planned. If you don't laugh, you'll cry. Finally, I'd say a teacher needs to be incredibly organized. Time management, organization...without those skills the job doesn't get done.

Your Job cont.

7) How did you acquire the skills you just identified?

Well, there's four years of undergraduate study leading to a B.A. Then two more years of post-graduate work to earn an M.A. We receive on-the-job-training, take countless workshops, observe other teachers, and learn through a lot of trial and error.

I think one of the biggest keys to skill acquisition is the flexibility thing. You have to be able to say, "OK...that didn't work so well...now what else can I try?" Then you take all you can from the things that work and use them for the next go-round.

8) How could you help a student learn and practice the skills you identified as important to your job in questions #4 through #6?

I would have to say shadowing. I don't think you can teach the skills...a student just has to observe and do it!

Interactive discussion is a very important part of the process as well. When discussing practices, it just can't be one-sided...my talking at the student. Students have to know their thoughts and ideals are important. It's also essential that students find an area they're interested in and work with the kids on that...in the early stages of learning, interest goes hand-in-hand with success.

9) Describe a recent problem on the job and how you solved it.

Well, recently I got two new students in my classroom, both of whom happened to be of Asian descent. In the lunchroom I started hearing comments like, "I can't tell them apart," or "They are supposed to be so smart."

To deal with the situation, I asked the new students to share their personal histories with the class. During reading hour, we all sat in a circle and talked. One of the girls was born in the U.S., but lived in South Korea for several years while her father worked for the U.S. government in Seoul. The other girl moved from Laos and has been in the States since she was four. It was very exciting sharing that way. We all learned a lot and the negative remarks stopped.

✔ FOR EXAMPLE:

- college courses
- on-the-job training
- self-taught
- apprenticeship
- professional development
- trade journals
- observation
- vendor workshops

PROBE QUESTIONS:

- A student cannot do your job, but what tasks (e.g., data entry, research, drafting a memo) could he or she do to help you in your work?
- What hands-on activities could a student do to get a flavor for your job?

PROBE QUESTIONS:

- How did you discover the problem?
- How did you handle it?
- Who else was involved in solving the problem?
- What was the outcome?
- How will you ensure the problem does not recur?

A

analyze

Your Job cont.

PROBE QUESTIONS:

- Is your job harder if other people don't do their jobs well?
- Do other people rely on your doing your work well?

10) How is your work interdependent with that of others in your organization?

Teaching is very interdependent...especially if you team teach. There is a lot of discussion and coordination to make sure all academic bases are covered. But even when you don't team-teach, this job is still interdependent. You have to cooperate with other teachers and staff about equipment and schedules. If someone forgets or misunderstands the agreement, you could be out a projector for the day. Also, if the fourth grade teacher doesn't cover some important skills, that deficiency falls in my lap the next year with my fifth grade class.

✔ FOR EXAMPLE:

- customer opinions
- stock market trends
- world news
- new technologies
- sales figures

11) What kinds of information do you need to use, analyze, and/or stay up-to-date on to do your job effectively?

Well, views on education are constantly changing so I read educational magazines, attend workshops and in-service classes. I stay tuned in to what's going on at the state level through newsletters and co-workers. I like to know the latest research and findings about education. I also like to know what other teachers are doing that works. One year the school put brochures on teaching in our boxes every week. They were really helpful. I saved them and still read them over now and then.

✔ FOR EXAMPLE:

- resolving an issue in your field or business
- using different equipment
- rethinking a process
- getting more training

12) What would improve the efficiency of your job?

Well, [laughs] my dream job would be fewer students, more planning time, and more computers...I guess all those things or any one of those things would improve the efficiency of my job.

✔ FOR EXAMPLE:

- new technology introduced
- more education required
- new skills necessary
- greater competition in worldwide marketplace
- more opportunities with an expanded demand for products and services

13) How do you think your job will change over the next 10 years? Why?

Well, we're gearing up for "Schools for the Twenty-First Century." This approach challenges the way we've looked at student success in the past...it's much more of a well-rounded way of looking at education. Not only will students learn academics, but life skills as well. This will change the way we evaluate students and the way we look at outcomes.

On the other hand, with all the budget cuts...our curriculum department is gone, our professional library is nearly gone, our teacher-trainers are gone...that will have a dramatic impact on education as well.

Part 2—The Workplace

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Directions:	The purpose of these questions is to find out about the workplace environment.

14) What are the health and safety issues at the workplace?

On a regular basis I get a form from our safety committee asking me if there are any safety hazards that I'm aware of. Teachers who want to serve food in the classroom need to get a food-handler's card, and a certain number of staff must have CPR certification. In my classroom I worry about sick students passing their cold/flu germs to other students or myself. Most parents don't send sick kids to school, but occasionally it does happen. If one student comes down with the flu...I can almost guarantee several others will too. But I guess I should be thankful...in the younger grades it's chicken pox...and that could run through your class for weeks!

✔ FOR EXAMPLE:

- smoking policy
- drug testing
- labor law age restrictions
- special clothes (smock, uniform, safety shoes)
- special gear (gloves, goggles, hard hat)

15) What technology and special tools are used by you and others at the workplace?

computer software	
overhead projector	
film projector	
TV/VCR	

✔ FOR EXAMPLE:

- computers
- hand tools
- lasers
- scales
- fax machines
- marker boards/flip charts
- cellular phones
- photocopiers
- medical instruments
- calculators

16) What written materials are used at the workplace?

books (fiction, non-fiction)	*Teacher handbook*
maps	*Student handbook*
books on teaching methods	*brochures, pamphlets*
memos to parents, faculty	*lesson plans, homework*

✔ FOR EXAMPLE:

- purchase orders
- contracts
- bilingual dictionaries
- maps
- training manuals
- equipment specifications
- federal, state, or local rules and regulations
- directories

A

analyze

The Workplace cont.

PROBE QUESTIONS:

- Who makes decisions about goals and does strategic planning?
- How are resources (e.g., time, money, materials) allocated?
- How are frontline workers involved in decisionmaking?
- How are workers' performances assessed?

17) How is the workplace managed to ensure that it is productive and financially sound?

Some decisions are made by me...some by the team...some by the principal. It's pretty democratic around here. "Management" is pretty well shared. We have staff meetings to discuss money for materials and projects. The budget is really tight these days. There's a limit on how much photocopying we can do, how many books we can order. Most teachers buy supplies out of their own pockets. Sometimes the school can pay for special things from its discretionary funds or the PTA will earn money. If you can convince the community that a project is important, you have a better chance of getting a grant or a donation.

PROBE QUESTIONS:

- How does the workplace affect the local economy?
- What zoning laws apply?
- What environmental factors determine how the workplace operates?
- What civic activities is the workplace involved in?

18) What impact does the workplace have on the local and global communities?

Our magnet program teaches a world language and culture. U.S. children have not traditionally been taught to think globally, so I find multicultural education an exciting trend.

Locally, our after-school (community school) program and open gym help bring "life" to the neighborhood. We also work very closely with a hospital nearby. Health care providers give presentations to our students several times a year. The school is viewed as a very positive thing in the neighborhood.

Part 3 — Learning on Site

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Directions: The purpose of these questions is to brainstorm ideas about the ways students can acquire and/or enhance job-related and academic skills at the workplace.

19) What academic skills do you need to do your job?

Elementary teachers are very broad-based...I like to say I'm a generalist, not a specialist. We use English, math, science...all of it! Even world language...I don't teach it but I support it.

Sometimes the specific academic skills I use during a school year vary, though. Like last year...I taught fourth grade, and taught all subjects to my students. This year I'm team-teaching grades four and five and I only teach language arts and social studies. My partner is teaching the math and science part of the curriculum.

✔ FOR EXAMPLE:

- English to write memos
- math to manage budgets
- chemistry to do lab tests
- geography to create maps

20) What are at least three ways a student could learn or apply mathematics at the workplace?

A student could:

- Determine points for assignments and plot a curve using percentages
- Plan and/or teach a math lesson
- Price materials and photocopying costs for a special project

℘ PROBE QUESTIONS:

- In what ways are basic computation (addition, subtraction, multiplication) and numerical concepts (fractions, decimals, percentages) a part of your job or the jobs of others at the workplace?
- Could a student use math skills to do tasks such as estimate, prepare graphs, help with inventory?

Learning on Site cont.

✔ FOR EXAMPLE:

- composing memos or letters
- editing documents
- public speaking
- synthesizing data
- greeting customers
- taking messages

21) What are at least three ways a student could learn or apply communication skills at the workplace?

A student could:

- Read students' writing (a book report, essay, or journal entry) and make written comments
- Write a letter to students' parents explaining a unit or lesson we are working on and tell parents/guardians how they can help their child
- Present a lesson plan clearly and concisely

Additionally, I would want them to observe how adults work together on ideas and lesson plans. Most middle and high school kids have no problem communicating with younger children. It's communicating with adults they need to work on.

✔ FOR EXAMPLE:

- A student at a veterinarian's office might investigate the effects of pet ownership on a person's health and sense of well-being.
- At a computer software design firm a student could research the impact of electronic communication on the printing industry.
- At a dairy farm a student might research the the impact health trends have had on milk consumption.
- At a carpentry shop a student could investigate how world markets are changing lumber specifications.

22) What are at least three ways a student could explore social issues at the workplace to understand important aspects of your job or industry?

A student could:

- Examine the effects of racism on education
- Present a lesson on cross-cultural communication
- Research the impact of illiteracy and investigate the controversy over reading instruction, especially the rift between those using phonics and whole-language learning

Learning on Site cont.

23) What are at least three ways a student could learn or apply scientific principles or concepts underlying your work?

A student could:

- Prepare and teach a science lesson
- Study learning theory and experiment with different methods in the classroom
- Design a computer science game for fifth grade students
- Study nutrition and school performance. (Do students who eat breakfast really do better in class than those who don't eat breakfast?)

✔ FOR EXAMPLE:

- A student at an office could study the health risks of prolonged use of computer keyboards.
- At an auto repair shop a student could examine car construction to establish which features are needed to protect passengers in side-impact accidents.
- A student at a fast-food restaurant could explore the chemical processes of the body that break down and store fat.

24) What opportunities are there for students to contribute to a creative or artistic process or product at the workplace?

Students could design an attractive and informative bulletin board or illustrated handouts. They could create a dramatic reading of a poem or story on tape, complete with music and sound effects. They could lead a class in imaginative writing or help the class produce a play. Or some might want to make a short film, a documentary about the school or a project the class is doing.

✔ FOR EXAMPLE:

- In a retail store a student could examine how presentation and lighting affect people's interest in shopping.
- At a day care center, a student could help produce a newsletter to parents.
- A student at a parts manufacturer could help create overheads for a presentation to potential clients.

Learning on Site cont.

✔ FOR EXAMPLE:

- In a doctor's office, where there is frequent turnover in receptionists, a student could develop a training manual to orient new staff to the computer and record keeping system.
- At a bakery, a student could organize and oversee the donation of day-old bread and pastries to local homeless shelters.
- At a bookstore, a student could design and produce a flyer announcing a new lecture series.

25) If a student were at your workplace to help you, what kinds of projects could you involve him or her in?

One project might be a dramatic interpretation of a fiction or non-fiction writing piece that related to a current classroom theme. The student could research an appropriate literary work, and present it to the class through a film, tape, or play.

Another project might involve ancient math. The student could research the origins of mathematics and present a lesson.

I would really appreciate help with the editing and layout of the class newsletter. A student could help me put it together.

A student could investigate illiteracy, observe teachers using different reading approaches, interview teachers, and present this research to the faculty.

Some students at the high school level are real computer wizards. For those who like to program, I'd encourage them to create a science or math game for elementary students. My kids love to do anything with the computers.

Notes...

Sal Martinez teaches fourth and fifth grade language arts and social studies.

This LSAF took only about 30-35 minutes to complete. When I commented how smoothly and quickly the interview went, Sal said it really helped having a copy of the LSAF beforehand to read and think about. Sal said it was necessary to think about some of the questions, and ask: "Now how does this apply to me in the school?"

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learning site
analysis form

glossary

This glossary defines terms used in this guide, as well as others relevant to work-based learning. Use it to help build a common understanding of work-based learning among all the partners who make it happen—students, parents or guardians, teachers, program coordinators, school administrators, employers, employees, union representatives, and other active members of your community.

All aspects of the industry. An approach to work-based learning that emphasizes broad, transferable knowledge of the workplace rather than job-specific skills. As originally defined by the Carl D. Perkins Vocational and Applied Technology Act, all aspects of the industry includes these eight components common in every industry or enterprise: (1) planning, (2) management, (3) finance, (4) technical and production skills, (5) underlying principles of technology, (6) labor issues, (7) community issues, and (8) health, safety, and environmental issues. Some programs using this all-aspects framework have added additional components, such as ethics, history, and economics.

Career. A career is the lifelong intersection of education and employment, as opposed to a single job at one moment in time. Making decisions that result in a satisfying career depends on applying accurate information about the labor market to one's own interests and values.

Career education. Career education is a lifelong process of investigating employment options and exploring, developing, and refining one's career interests and skills.

Career exploration. A worksite experience (typically 10 to 30 hours over the course of several days or weeks) during which the student observes and interacts with workers, participates in hands-on activities, and completes written assignments to learn about the skills and knowledge required at the workplace.

Competency-based education. A curriculum and instructional approach based on the demonstration of knowledge and skills.

Cooperative education. A paid work experience arranged and supervised by a school, for which a student receives academic

credit and works toward an occupational goal.

Continuum of work-based learning. A progression of worksite experiences that range from field trip through extensive work-based learning. As the worksite experiences become increasingly complex, greater time and commitment are required from employers, teachers, and students.

Employability skills. Work habits, social skills, and attitudes valued by employers in any occupational area (e.g., responsibility, communication, initiative, teamwork, cooperation, attendance, organization, and flexibility).

Entry-level skills. The minimum education and skill qualifications necessary for obtaining and keeping a specific job; the starting point in a particular occupation or with a certain employer.

Extensive work-based learning. A worksite experience (typically three to 12 months) during which a student progresses through a planned sequence of increasingly demanding activities integrated with academic learning to (1) learn entry-level job skills and (2) receive skill certification and/or postsecondary school credits.

Fair Labor Standards Act (FLSA). A federal law, enacted in 1938, that includes rules and regulations regarding child labor. The FLSA is applicable in every state; however, there are variations in state and federal child labor laws. If state and federal rules and regulations conflict, the stricter one applies.

Field trip. A worksite experience (typically one to three hours) during which a group of students, escorted by school staff, tours a business and speaks with workers.

Integrated curriculum. A way of organizing curriculum content so that academic learning and hands-on worksite experiences are linked to complement and reinforce each other.

Industry skill standards. Employer-defined and accepted levels of performance required for success in a particular occupation. Standards set by industries typically define core competencies and the related knowledge and skills integral to specific jobs.

Internship. A worksite experience (typically three to 18 weeks)

during which a student completes a planned series of activities, set of learning objectives, or project(s) designed to give a broad understanding of a business or occupational area. An internship culminates in a demonstration (product or presentation) of learning jointly evaluated by school and worksite staff.

Job shadow. A worksite experience (typically three to six hours) during which a student spends time one-on-one with an employee, observing daily activities and asking questions about the job and workplace.

Mentor. A trusted, experienced, and interested individual who guides the development, education, and/or career of a younger or less experienced person. Many school districts recruit, train, and coordinate community volunteers to serve as both career and personal mentors for students.

Nontraditional occupations. Occupations in which representation of men or women has traditionally been less than 25 percent. For example, nontraditional occupations for women include auto mechanics and engineering; nontraditional occupations for men include nursing and secretarial work.

Occupational skills. The ability to perform tasks specific to a particular job. Occupational skills or job skills are sometimes contrasted with employability skills that are common to all jobs; for example, using a cash register is an occupational skill, while the ability to communicate well is an employability skill.

Occupational Safety and Health Administration (OSHA). A federal agency that develops and issues regulations concerning health and safety on the job; it conducts investigations and inspections to determine workplace compliance.

Portfolio. A collection of materials that documents and demonstrates a student's academic and work-based learning. Although there is no standard format for a portfolio, it typically includes many forms of information that exhibit the student's knowledge, skills, and interests. By building a portfolio, students can recognize their own growth and learn to take increased responsibility for their education. Teachers, mentors, and employers can use portfolios to record educational outcomes and for assessment purposes.

Reflection. Activities and assignments that are designed to encourage students to (1) analyze their learning experiences in the context of their interests, abilities, and values, (2) connect work with what they are learning in school, and (3) set meaningful personal and career goals. Reflection can be organized as group discussion, journal writing, role playing, or multi-media projects as well as any other activities which help students apply what they have learned to their own lives and future.

School-to-work transition. By restructuring education so that school-based learning is integrated with learning in the community, school-to-work (also called school-to-careers) increases opportunities for all students to identify and pursue their educational and career goals.

SCANS (Secretary's Commission on Achieving Necessary Skills). A 1991 federal report, *What Work Requires of Schools*, that identifies skills and competencies necessary for work readiness in any occupational area. The skills are divided into two categories: (1) foundation skills (basic skills, thinking skills, and personal qualities), and (2) workplace competencies (ability to productively use resources, interpersonal skills, information, systems, and technology).

Skill certification. Official confirmation that a student or worker can successfully perform a task to a set of accepted standards.

Transferable skills. Skills that are interchangeable among different jobs and workplaces. For example, the ability to handle cash is a skill transferable from restaurant cashier to bank teller; the ability to function well as a team member is transferable among most jobs and workplaces.

Work-based learning. A structured learning experience that integrates worksite experiences with classroom instruction. Through work-based learning students gain employability and occupational skills while applying and advancing their knowledge in academic areas.

Worksite contact person. The person at a worksite who coordinates work-based learning activities for students. This person's responsibilities may include (1) maintaining contact with school staff, (2) acting as a resource for other employees working with students, and (3) identifying the support necessary to provide a meaningful experience for students.

learning site analysis form (master copy)

This section includes a master copy of the *Learning Site Analysis Form* for your reference. A second camera-ready copy, which you can duplicate for your own use, is packaged separately.

A

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Learning Site Analysis Form

Workplace contact

Title

Organization

Address

Phone

School contact

Date

CONNECTIONS
LINKING WORK AND LEARNING

Tips for completing the Learning Site Analysis Form

The purpose of the *Learning Site Analysis Form (LSAF)* is to identify opportunities for students to learn at a workplace and to connect that experience with learning in school.

The *LSAF* is designed to facilitate a conversation between you (a teacher or other school staff member) and the employer or employee who will be working directly with students. Through the conversation you will gain a broad understanding of how and under what conditions that person does his or her job. And together you will begin to explore different ways students can become active learners both inside and outside the classroom.

Following are tips for making the *LSAF* process go smoothly:

- Let the employer or employee see a copy of the *LSAF* before your scheduled conversation. It will save time if he or she knows what kinds of questions to expect.
- Specify how much time you will need for the meeting before you begin.
- Explain the purpose of the *LSAF*, briefly describing the benefits of students learning at the workplace.
- Before asking questions, read to the employer the directions at the beginning of each section.
- Use the examples and cue words in the margins as prompts to help the conversation run smoothly.
- Remember, this is a conversation. It is a chance to meet new people in your community and exchange ideas about new ways for students to learn.

Part 1 — Your Job

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Directions: The purpose of these questions is to paint a detailed picture of the skills and activities associated with the job.

1) Describe your work environment.

✔ FOR EXAMPLE:

- physical layout
- work atmosphere
- dress code
- number of staff
- stress level

2) What is a typical day at work like?

PROBE QUESTIONS:

- What hours do you work?
- What kinds of tasks do you do on a daily basis?
- What kinds of decisions do you make regularly?
- Whom do you interact with on most days?
- Do you generally deal more with people or equipment?
- Do you work independently or as part of a team?
- Can you usually work uninterrupted by meetings, phone calls, or emergencies?
- What is the "rhythm" of your day? When are things busy and when do they slow down?

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Your Job cont.

3) What are the five most important responsibilities of your job?

_____

_____

_____

_____

_____

✔ FOR EXAMPLE:

- using tools (e.g., drill, microscope, camera)
- using information (e.g., data analysis, teaching)
- using technology (e.g., software design, word processing)

4) What technical skills do you need to do your job?

✔ FOR EXAMPLE:

- listening to customers
- being a team player
- resolving conflict
- communicating clearly
- working with diverse people
- teaching others

5) What interpersonal skills do you need to do your job?

✔ FOR EXAMPLE:

- helping others
- adapting to change
- allocating resources
- thinking creatively
- taking a leadership role
- improving systems
- time management
- supervising other people

6) What additional skills and/or personal qualities does your job require?

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Your Job cont.

7) How did you acquire the skills you just identified?

✔ FOR EXAMPLE:

- college courses
- on-the-job training
- self-taught
- apprenticeship
- professional development
- trade journals
- observation
- vendor workshops

8) How could you help a student learn and practice the skills you identified as important to your job in questions #4 through #6?

℘ PROBE QUESTIONS:

- A student cannot do your job, but what tasks (e.g., data entry, research, drafting a memo) could he or she do to help you in your work?
- What hands-on activities could a student do to get a flavor for your job?

9) Describe a recent problem on the job and how you solved it.

℘ PROBE QUESTIONS:

- How did you discover the problem?
- How did you handle it?
- Who else was involved in solving the problem?
- What was the outcome?
- How will you ensure the problem does not recur?

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Your Job cont.

PROBE QUESTIONS:

- Is your job harder if other people don't do their jobs well?
- Do other people rely on your doing your work well?

10) How is your work interdependent with that of others in your organization?

✔ FOR EXAMPLE:

- customer opinions
- stock market trends
- world news
- new technologies
- sales figures

11) What kinds of information do you need to use, analyze, and/or stay up-to-date on to do your job effectively?

✔ FOR EXAMPLE:

- resolving an issue in your field or business
- using different equipment
- rethinking a process
- getting more training

12) What would improve the efficiency of your job?

✔ FOR EXAMPLE:

- new technology introduced
- more education required
- new skills necessary
- greater competition in worldwide marketplace
- more opportunities with an expanded demand for products and services

13) How do you think your job will change over the next 10 years? Why?

Part 2—The Workplace

Directions: The purpose of these questions is to find out about the workplace environment.

14) What are the health and safety issues at the workplace?

✔ FOR EXAMPLE:

- smoking policy
- drug testing
- labor law age restrictions
- special clothes (smock, uniform, safety shoes)
- special gear (gloves, goggles, hard hat)

15) What technology and special tools are used by you and others at the workplace?

✔ FOR EXAMPLE:

- computers
- hand tools
- lasers
- scales
- fax machines
- marker boards/flip charts
- cellular phones
- photocopiers
- medical instruments
- calculators

16) What written materials are used at the workplace?

✔ FOR EXAMPLE:

- purchase orders
- contracts
- bilingual dictionaries
- maps
- training manuals
- equipment specifications
- federal, state, or local rules and regulations
- directories

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The Workplace cont.

PROBE QUESTIONS:

- Who makes decisions about goals and does strategic planning?
- How are resources (e.g., time, money, materials) allocated?
- How are frontline workers involved in decisionmaking?
- How are workers' performances assessed?

17) How is the workplace managed to ensure that it is productive and financially sound?

PROBE QUESTIONS:

- How does the workplace affect the local economy?
- What zoning laws apply?
- What environmental factors determine how the workplace operates?
- What civic activities is the workplace involved in?

18) What impact does the workplace have on the local and global communities?

Part 3—Learning on Site

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Directions: The purpose of these questions is to brainstorm ideas about the ways students can acquire and/or enhance job-related and academic skills at the workplace.

19) What academic skills do you need to do your job?

✔ FOR EXAMPLE:

- English to write memos
- math to manage budgets
- chemistry to do lab tests
- geography to create maps

20) What are at least three ways a student could learn or apply mathematics at the workplace?

PROBE QUESTIONS:

- In what ways are basic computation (addition, subtraction, multiplication) and numerical concepts (fractions, decimals, percentages) a part of your job or the jobs of others at the workplace?
- Could a student use math skills to do tasks such as estimate, prepare graphs, help with inventory?

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Learning on Site cont.

✔ FOR EXAMPLE:

- composing memos or letters
- editing documents
- public speaking
- synthesizing data
- greeting customers
- taking messages

21) What are at least three ways a student could learn or apply communication skills at the workplace?

✔ FOR EXAMPLE:

- A student at a veterinarian's office might investigate the effects of pet ownership on a person's health and sense of well-being.
- At a computer software design firm a student could research the impact of electronic communication on the printing industry.
- At a dairy farm a student might research the the impact health trends have had on milk consumption.
- At a carpentry shop a student could investigate how world markets are changing lumber specifications.

22) What are at least three ways a student could explore social issues at the workplace to understand important aspects of your job or industry?

Learning on Site cont.

23) What are at least three ways a student could learn or apply scientific principles or concepts underlying your work?

✔ FOR EXAMPLE:

- A student at an office could study the health risks of prolonged use of computer keyboards.
- At an auto repair shop a student could examine car construction to establish which features are needed to protect passengers in side-impact accidents.
- A student at a fast-food restaurant could explore the chemical processes of the body that break down and store fat.

24) What opportunities are there for students to contribute to a creative or artistic process or product at the workplace?

✔ FOR EXAMPLE:

- In a retail store a student could examine how presentation and lighting affect people's interest in shopping.
- At a day care center, a student could help produce a newsletter to parents.
- A student at a parts manufacturer could help create overheads for a presentation to potential clients.

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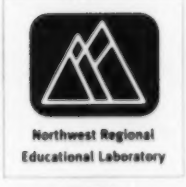
Learning on Site cont.

✔ FOR EXAMPLE:

- In a doctor's office, where there is frequent turnover in receptionists, a student could develop a training manual to orient new staff to the computer and record keeping system.
- At a bakery, a student could organize and oversee the donation of day-old bread and pastries to local homeless shelters.
- At a bookstore, a student could design and produce a flyer announcing a new lecture series.

25) If a student were at your workplace to help you, what kinds of projects could you involve him or her in?

Notes...



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Connections: Linking Work and Learning

This is a series of products designed to facilitate work-based learning so that youth make informed career choices and experience success in the world of work. Other products in the series include:

Employer Recruitment and Orientation Guide—Helps school staff develop and implement strategies to recruit and orient employers for providing work-based learning experiences for students. The guide includes 15 fact sheets, answering the questions most commonly asked by employers, that can be used for a variety of recruitment and orientation purposes.

Job Shadow Guide—Helps a student investigate a specific job during several hours at a worksite. A companion piece for staff outlines how to plan and implement effective job shadow experiences.

Career Exploration Guide—Helps a student explore all aspects of a job/career over the course of several days at a worksite. A companion piece for staff outlines how to plan career explorations that are of maximum benefit to students.

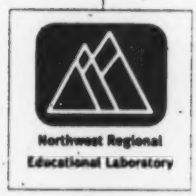
Integrated Workplace Learning Project—Highlights how to design individual or group projects that integrate academic with work-based learning.

Survival Skills Guide—Provides strategies for identifying and teaching survival skills essential for independent living.

Learning in the Community: From A to Z—Gives a tour of key concepts and strategies intrinsic to making the community an extension of the classroom.

To order materials in this series, contact NWREL Document Reproduction Service at (800) 547-6339 ext. 519

For information about related staff development workshops, contact NWREL Education and Work Program at (800) 547-6339 ext. 595 or (503) 275-9595.



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